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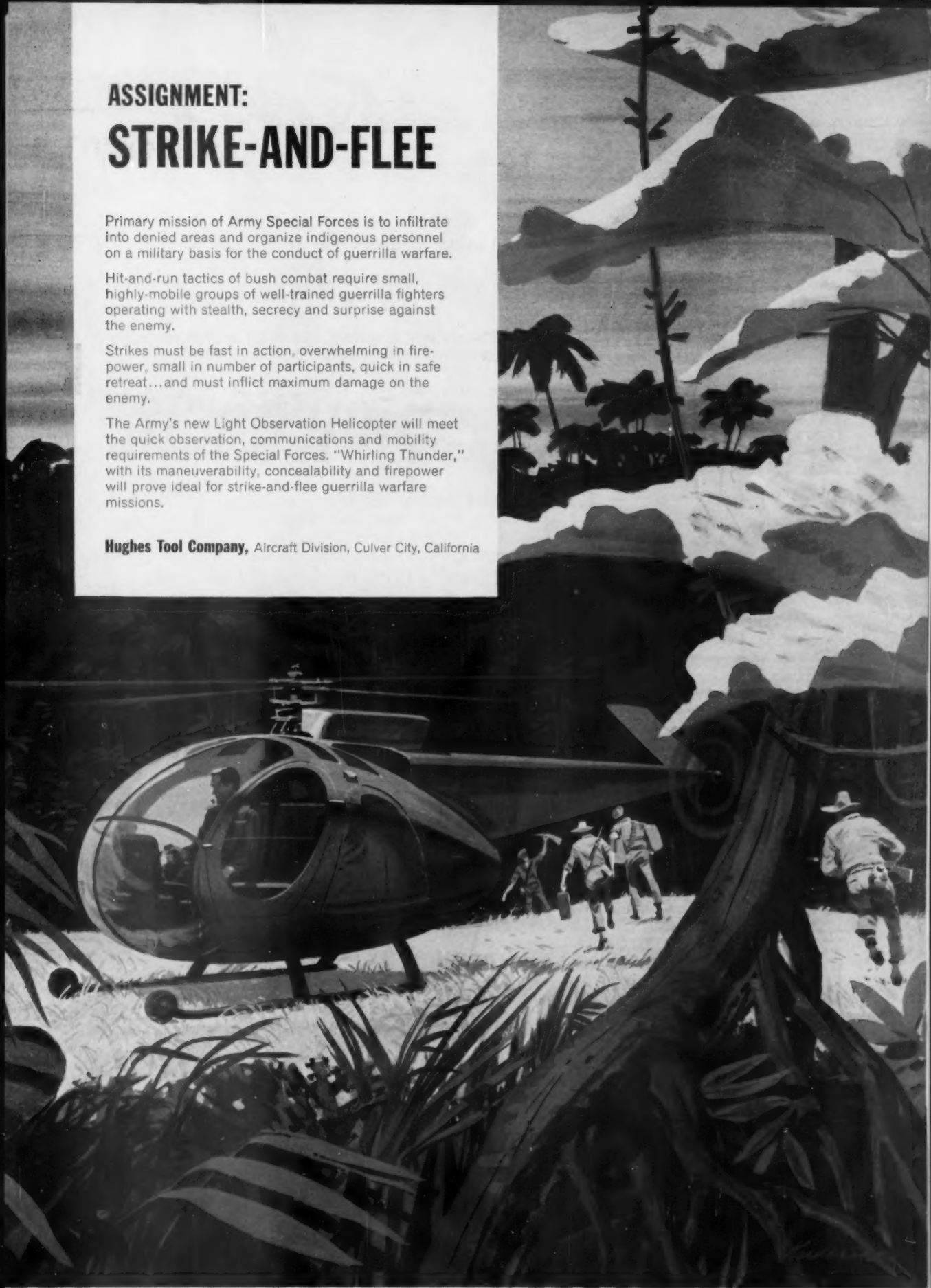
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ARMY

A PROFESSIONAL PUBLICATION DEVOTED TO THE ADVANCEMENT OF THE MILITARY ARTS AND SCIENCES AND REPRESENTING THE INTERESTS OF THE ENTIRE U. S. ARMY

ISHMAEL NO LONGER. To get back up the Army must accept a challenge 28

POINT'S IN THEIR EYES. The routing and some of the scenery that lead from Army green to Cadet grey. Charles A. Dodson 30

THE WRITING OF OFFICIAL HISTORY. The official historian can help man better understand the evils of war. Dr. Louis Morton 38

WINTERSHIELD 2. Seventh Army's largest maneuver for Fiscal 1961 simulates war in a nuclear climate. Capt. Robert B. Asprey 40

CAN WE RESCUE GOLD? Balancing the payments is tricky but it can be done. Lt. Col. Charles W. Schudt 47

SCIENCE AND ARMY TRAINING. Improvement through what HumRRO is doing. Lt. Col. Franklyn J. Michaelson 51

PENTAGONESE. The Pentagon is peopled with those "who go word-fowling with a blunderbuss." Fred D. McHugh 56

RAPID-FIRE TRAINFIRE. An 1861 rifle musket shows that Trainfire does not teach the soldier to use his rifle to its utmost capability. Lt. Col. Paul V. Liles 59

LA GUERRA DE GUERRILLAS. The final instalment of Guevara's manual deals with internal organization of the guerrilla front. 63

MEDICAL SPECIALISTS FOR STRAC. The graduates of Fort Bragg's medical school are trained for direct assignment to STRAC units. Lt. Col. John C. Keele, Jr. and SFC Charles W. Baxtresser 76

DEPARTMENTS

Letters	6	Editorial	24
Authors	16	Cerebrations	70
Front and Center	20	Irons in the Fire	80
Book Reviews	84		

COVER

By Vincent Bianchini, Courtesy of *The Northeaster* (Magazine of Northeast Air Lines), November-December 1960.



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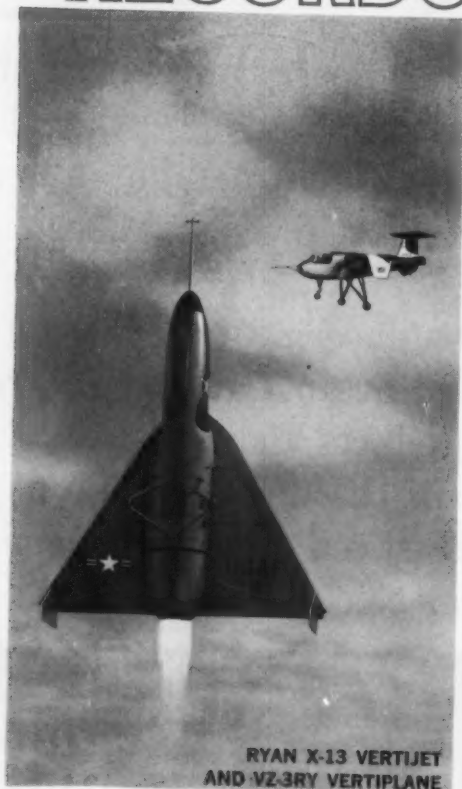
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letters

VALUE OF GUERRILLA TACTICS

● The condensation from Che Guevara's book in the March issue brings back to our consciousness lessons which were learned long ago and have long been forgotten. These same principles are applied by all successful guerrillas.

I suggest you have missed a great purpose and opportunity in presenting this condensation. The real lesson is not that our conventional forces must contend with guerrilla forces. After all, we are on the side of the fight against tyranny. The Cuban rebels today are applying these tactics against the tyranny of Castro and Guevara. It is these rebels who now represent the Cuban people.

Guevara's book is an invitation to free men everywhere to use these same tactics for the people against the Communist tyrannies. This has been the great default of the free

world: that we have not provided the leadership for the people against the tyrant, but have abandoned the people to unending slavery.

If our courage were equal to that of the Communists, they wouldn't have a chance.

MAJ. GEN. T. A. LANE
Vicksburg, Miss.

● I agree that discussions of guerrilla warfare are valuable but one sentence in the introduction to Guevara's book should be challenged: "It is an accepted fact that this guerrilla activity was a major factor in the Russian victory."

The best study of Russian guerrilla activity I know of is DA Pamphlet 20-244: *The Soviet Partisan Movement, 1941-1944*, by Maj. E. M. Howell. On page 209 this report says: "The Soviet Partisan Movement had a certain measure of success, perhaps as much as a resistance movement can have when opposed by a

first-class military power. But this success was definitely limited." The detailed discussion of events during the years 1941-44 well supports the quoted conclusion.

VERNE C. FRYKLUND, JR.
Spokane 4, Wash.

"UNCONVENTIONAL" IS OUT

● Reference your editorial about Special Forces in the April number, and the connotations of the term "unconventional" as applied to their operations, I heartily agree with removing the word from the Army's lexicon.

Since this type of warfare now is so commonplace, as actually it has been throughout history, what's so special about it? Any study will reveal this is warfare in its most basic form.

Why not call Special Forces the "Basic Operations Branch" and designate its groups "Basic Operations Groups." That would give the word "unconventional" back to the beatniks.

SGT. HAHN FUGLEMAN
Washington, D. C.

MORE ORCHIDS FOR KLEINMAN

● Along with the well-deserved orchids that have been going to Sergeant Kleinman for "Haman Notch," in the January issue, let us not forget that until that article, one of ARMY's best was "Paradox of Fontenoy," by Master Sergeant Forrest K. Kleinman, in the April 1960 issue.

COL. H. F. MCMANUS
Springfield, Ill.

FOR 7TH CAVALRY VETERANS

● I would like to acquire all possible information about the history, activities, and personalities of Troop B, 7th Cavalry, or of the 7th Cavalry Regiment, during the period 1866-90. Information concerning old uniforms, equipment, photographs, and Indian artifacts may be used to accompany displays in our trophy room.

Anyone having such information is requested to write to Commanding Officer, 2d Reconnaissance Squadron, 7th Cavalry, APO 139, New York, N. Y.

LT. COL. LLOYD S. SULLIVAN
APO 139, New York, N. Y.

NEED FOR TAC AIR

● Congratulations to Colonel Guntharp on his article regarding tactical air support [February]. He expresses the real need of an integrated air-ground force for fighting under modern conditions. I concur wholeheartedly with his views.

Although steps are in progress to modernize the firepower and mobility

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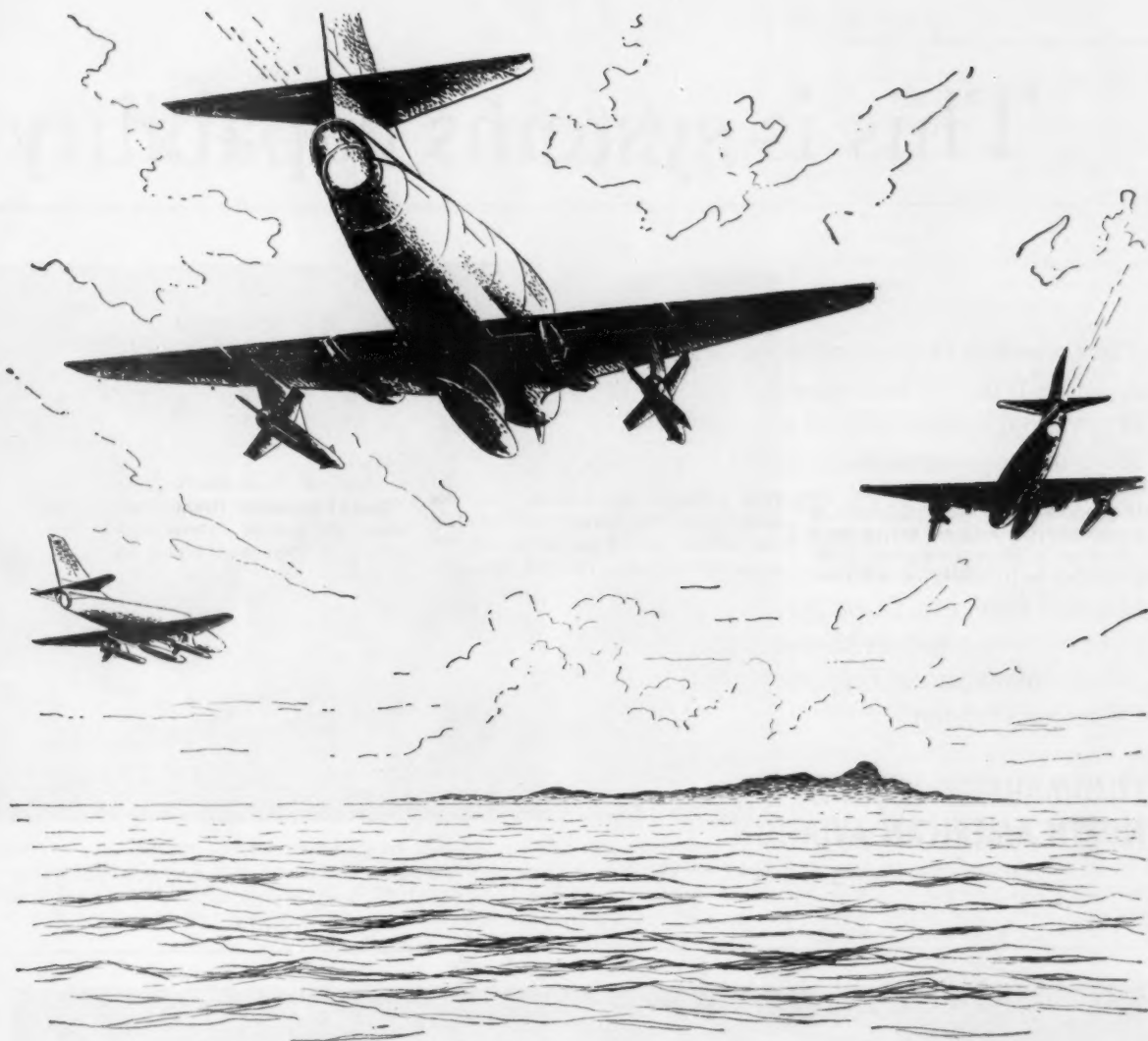
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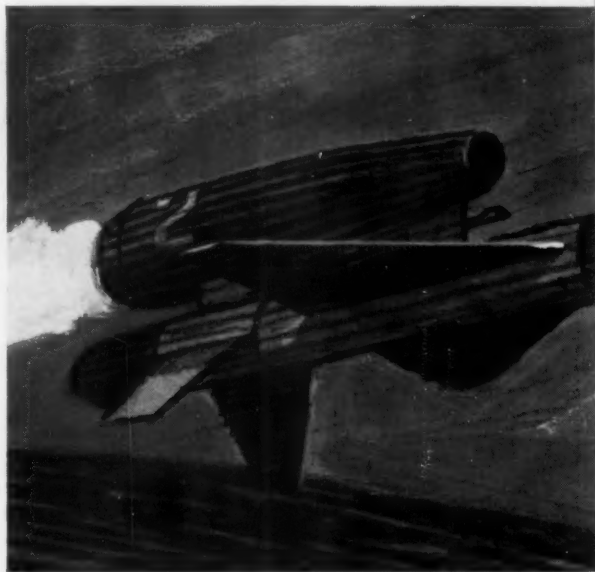
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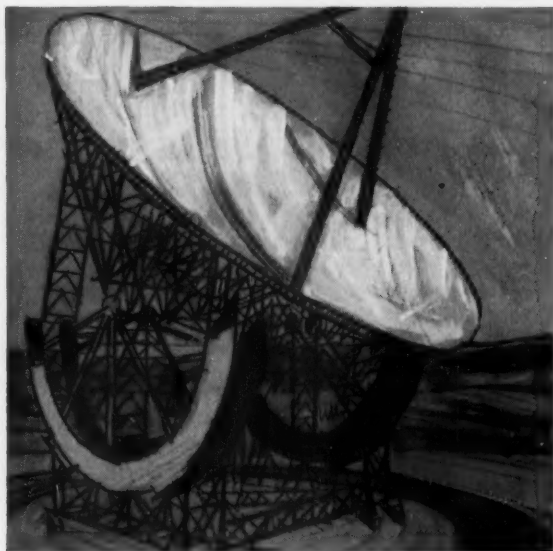
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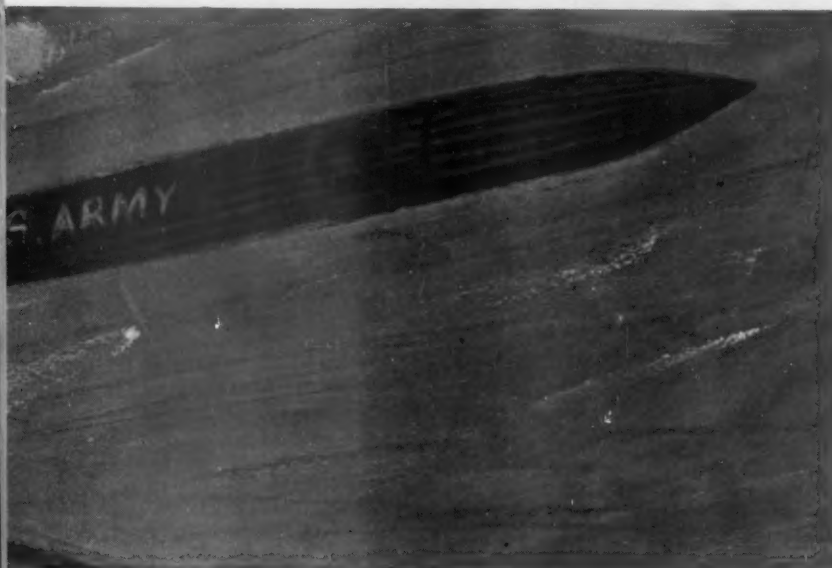


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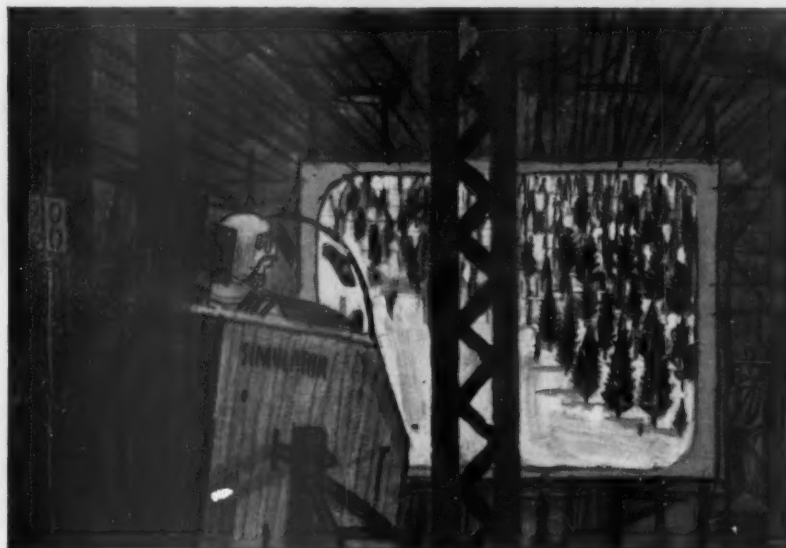


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LETTERS

of our ground forces, there is still the gap of close-air support.

Considering the capabilities in mobility of modern forces and the lessons of World War II and Korea, it is difficult to reconcile this gap. Be that as it may, Colonel Guntharp has many supporters.

Perhaps through perseverance and open review of requirements, some action may precipitate a weapon system that will do the job—one that is conceived and developed specifically for the mission, and not a substitute system.

COL. N. R. MACINTYRE

U. S. Marine Corps, Ret.

LaJolla, Calif.

LIEUTENANTS AND ROTC TRAINING

● I have been a cadet member of Heights Company, AUSA, for more than three years, and enjoy the excellent articles in *ARMY*.

"Train Them to Lead Platoons," by Captain E. Lloyd Murphy, in the March issue, was received with much enthusiasm. Captain Murphy's idea of extending ROTC summer camp to eight weeks was discussed by many members of Heights Company here at New York University. From the cadet's point of view, we fully agree, and look forward to the day when such a change is instituted.

When cadets drill and administer a cadet corps they gain experience. However, since they deal with fellow students at a higher level of command they tend to subordinate leadership to friendship and fellowship. That is, the leader's role played by a cadet colonel, acting as battle group commander, in relation to a cadet master sergeant who sits next to him in a class, is of course very different from the same in relation to Regular Army people. In a Regular outfit this close friendship would be eliminated and the cadet's true leadership qualities would come to the fore.

ROBERT JAMES PARLOW

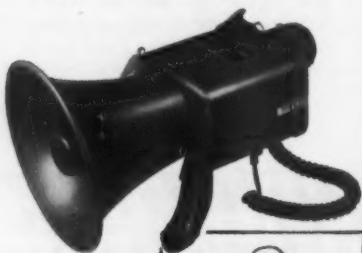
New York, N. Y.

● What about the many college graduates who each year begin civilian careers? Very few have experienced the challenge of the positions they undertake. Today civilian and military schools produce people who constantly expect to encounter changing conditions and successfully solve new problems. Are OCS graduates better officers because they have already experienced Army environments? Does the military training at West Point, and the military colleges, result in better leaders? I believe that initial

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LETTERS

performance, whether in terms of two weeks or longer, is less significant than Captain Murphy's article implies.

During 17 months as a regimental commander I had many new second lieutenants report for their first troop duty. Regardless of the source of their commissions, these young officers first had to prove themselves leaders in the hearts and minds of their men. Any initial disadvantage on the part of the officers commissioned from ROTC quickly disappeared, and they proved their ability in much less than six months. Frankly, I believe the Army is more interested in over-all effectiveness and potential of its new lieutenants. Let's call them *all* Army officers, regardless of the source of their commission.

Unless the objectives of the ROTC program are changed, I question the need for Captain Murphy's scheme. Practical experience in a troop unit should follow rather than precede attendance at a service school. Sporadic reports on the application of the ROTC program offer insufficient reason for concluding that it needs a complete overhaul. From my experience here I know Captain Murphy's scheme is unnecessary in increasing the number of distinguished military students who apply for Regular Army commissions. Eighty per cent of this year's eligible DMS, including the best, are applying for RA commissions. Surely this is an acceptable rate, and results from reasons other than summer camp.

COL. WILLIAM E. ROBERTS
Morgantown, West Va.

DRAPER TROPHY AWARD CHANGES

● Having read AR 672-73, Decorations and Awards (Armor Leadership Award), I think only one Draper Trophy Award should be presented to an armor unit of an infantry division.

I firmly believe that reconnaissance troops should not compete with armor companies, because the mission of each unit is different. The differences in make-up place a greater burden on the recon troop, since it must be proficient in tank gunnery, the 4.2-inch mortar, small arms, and scout reconnaissance. On the other hand, the armor company must be proficient in tank gunnery only. Tactics concern both, but here again reconnaissance units must perform the tasks of a combined-arms team.

Basically, when comparing these two types of armor unit, it is like matching oranges and apples. As a result, it is most difficult to establish a

common denominator so that scoring of units can be uniform. Armor companies should be compared with armor companies, and armor reconnaissance troops with armor reconnaissance troops.

I feel that the Draper Trophy Award committee should reevaluate the requirements for this award and offer *two* trophies to infantry and armored divisions: one for the best armor company of the medium tank battalion, the other for the best reconnaissance troop of the armored cavalry squadron.

LT. COL. LLOYD S. SULLIVAN
APO 139, New York, N. Y.

STUDIES OR ESTIMATES?

● Riley Sunderland, in "Strategic Estimates or Strategic Studies?" (January 1961), suggests that something is wrong with the reasoning by which our military and political leaders decide on national security policies and programs. He calls for more thorough studies on which to base these decisions. I disagree with two of his points.

First, I fail to understand his implication that the processes of estimating the future course of events is somehow a misleading and non-essential step in the decision-making process—that it does indeed "tend to encourage a passive attitude." The hard fact is that, faced with finite limits on our own capabilities, political and military leaders necessarily must choose how best these capabilities can be employed.

We cannot conceivably be ready to meet all possible threats to our national interests. The sum total of the capabilities of all other nations to do us physical, political or economic harm is simply overwhelming. Hence, decision-makers face at least the necessity to estimate which of these capabilities are most likely to be employed against our interests.

Great Britain is generally conceded to be a highly reliable ally. This is not a conclusion as to capabilities; it is a long-range strategic estimate—one on which our security planners have based many vital decisions, and one which is surely as reliable as any prediction of human actions can be.

In short, estimating—whatever its human weaknesses—is an essential step in the thought processes leading from an understanding of current conditions to a decision on policy and programs. More than this, when Mr. Sunderland approves the suggestion that we "seize the diplomatic initia-



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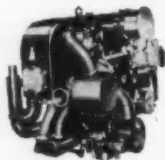
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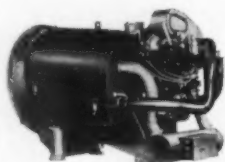
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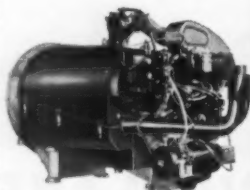
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LETTERS

tive," it is hardly logical for him to urge in the same breath an eschewal of estimates. To gain the initiative is desirable, but exercising initiative calls for estimates of the most subtle kind as to the probable consequences of any action we may take. The intellectual process of making estimates, by its very nature, is not a surrender of initiative or an encouragement to passivity. No amount of crying for stronger policies and more positive and more successful programs can undo the marriage of study and estimate necessary in an imperfect world.

My second disagreement relates to the statement that "the range of skills and interests involved in producing the long-range strategic estimate are beyond those to be found in a group of officers." This hardly squares with his assertion that the professional soldier can and must tell his superiors that "a hostile regime" in some country would be "an intolerable threat to the safety of the United States." Such a statement, if it is to be meaningful rather than dangerously misleading, cannot be based on some narrow professional expertise. Both the person making it and his audience must agree as to the meaning of the terms "hostile regime," "intolerable threat," and "safety of the United States." Each of these terms implies a great deal about politics and, particularly for the last, economics. This is a long way from being an argument that all professional officers need graduate degrees in politics or economics; but it does indicate the inescapable necessity for possessing a rather broad "range of skills and interests" by both military and political decision-makers, and their staffs.

No matter how expert the estimators, a degree of humility is needed; for estimates will always be based on necessarily incomplete and inconclusive analyses of real conditions and capabilities. More important, however, even the best analysis will never lead to fruitful policies without the intervention of some estimate of the relation among these conditions, our own capabilities, and the need to act.

CAPT. JAMES M. GERHARDT
West Point, N. Y.

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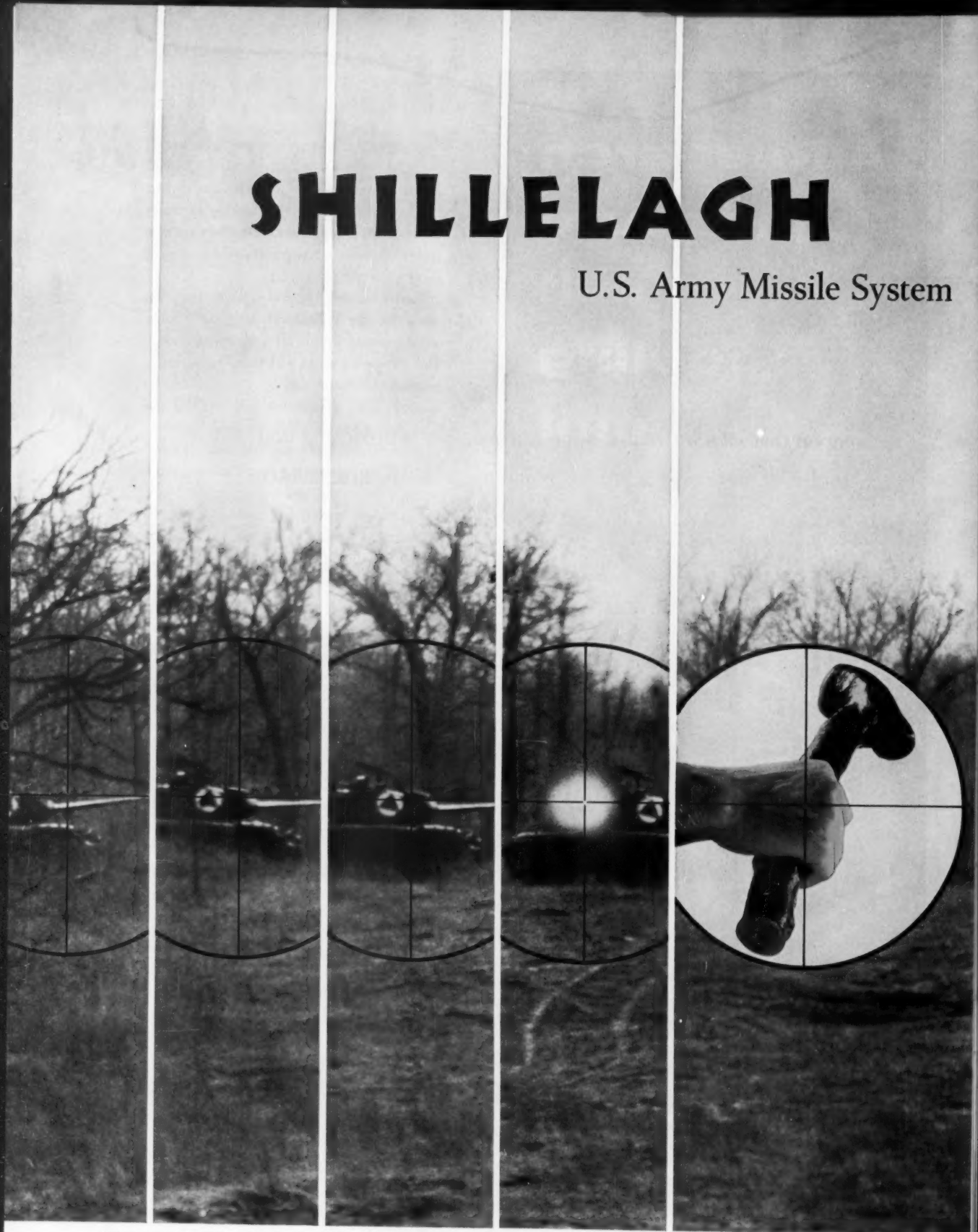
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ARMY

authors

CHARLES A. DODSON (page 30), an associate editor of *ARMY*, retired last year as a sergeant first class. During World War II he served in Europe with an artillery battalion of the 8th Infantry Division, and is a veteran of Korea.

LOUIS MORTON (page 38), now Professor of History at Dartmouth College, until last summer was a civilian historian in the Office of the Chief of Military History. Among his contributions to the official history of World War II, is the excellent *The Fall of the Philippines* (1953). Others are *Strategy and Command: Turning the Tide, 1941-1943* (forthcoming) and (co-author) the second volume, *The Road to Victory, 1943-1945* (forthcoming). He contributed four chapters to *Command Decisions*. He has written numerous articles for military and historical journals and has lectured at several Army service schools and civilian universities.

CAPT. ROBERT B. ASPREY, *USMCR* (page 40), after serving on the Alcan Highway during 1942, enlisted in the Marine Corps and commanded a company on Iwo Jima. After graduating from the University of Iowa and Oxford, he was with Army Intelligence in Salzburg, Austria, and then returned to the Marines to serve on the staff of the CG, Fleet Marine Force, Atlantic. During 1955-56, he attended the University of Vienna, where he wrote *Panther's Feast* (1959), a biography of the notorious Colonel Alfred Redl. A professional writer, Captain Asprey has had articles in many service journals and civilian periodicals. He has been in Europe for several months and "covered" Wintershield II for *ARMY*.

LT. COL. CHARLES W. SCHUDT, *Finance Corps* (page 47), is a student at the Army War College.

LT. COL. FRANKLYN J. MICHAELSON, *Artillery* (page 51), is Chief

of the Research Branch, Training Division, Office of the Deputy Chief of Staff for Operations, Plans and Training, at CONARC. Commissioned from the ROTC at UCLA in 1942, he served in the CBI Theater, has been on the Staff and Faculty at West Point, and in Korea was Secretary of the General Staff, Eighth Army. Colonel Michaelson earned his M.A. and Ph.D. degrees at Ohio State University.

FRED D. MCHUGH (page 56), was deputy chief and chief of the Public Information Office, Office of the Chief of Ordnance, for 15 years preceding his recent retirement. He served in the Tank Corps of the AEF, was associate editor and executive editor of *Scientific American*; Chief of the Publications Review Section in the Office of the Secretary of the Navy; historian of Army Ordnance and editor of *Ordnance Digest*. He has written numerous articles and editorials for national magazines and encyclopedias.

LT. COL. PAUL V. LILES, *Infantry* (page 59), after graduating from USMA in 1941, served in the Solomon Islands and on Luzon. While a military advisor in Korea, he was captured in 1950 in the first battle against the Chinese Communists near the Yalu River. At Fort Leonard Wood, his current station, he was executive officer of the 2d Training Regiment Basic when Trainfire was instituted there in 1959. He now commands the U. S. Army Reception Station there.

MAJOR THOMAS W. BOWEN, *Armor* (page 70), a 1948 graduate of USMA, has served with the Constabulary in Germany and with two armored divisions. After completing graduate work at Vanderbilt University, he is now on duty at West Point. This is his fifth Cerebration in *ARMY*.

LT. JOHN G. KELIHER, *Armor*

(page 70), was commissioned from the University of California in 1956 and is now on duty with the 3d Recon Squadron, 4th Cavalry, at Schofield Barracks. He has served as tank and cavalry platoon leader, and as instructor and executive officer of the 25th Infantry Division NCO Academy.

LT. WILLIAM J. LIELL, *Artillery* (page 71), enlisted in 1950, became a senior parachutist, and served with the 187th Airborne RCT in Korea. He was commissioned from OCS and graduated from the Ranger School in 1955. Lieutenant Liell is now in Germany with the 2d Howitzer Battalion, 92d Artillery.

MAJOR ROLFE L. HILLMAN, JR., *Infantry* (page 72), a 1945 graduate of USMA, has served in Japan, Korea, and Europe, and is now on the Staff and Faculty of The Infantry School. This is his fourth contribution to *ARMY*.

STAFF SGT. WALTER H. DABNEY (page 72), earned his B.S. at Howard University and his M.S. in highway engineering at Iowa State University. In Italy he commanded a rifle company, and served as S3 of an infantry regiment and an engineer regiment. After a tour as PMS at Tuskegee Institute, Sergeant Dabney (Lt. Col., Infantry, USAR), is with the Division of Geodesy, U. S. Army Map Service, Far East.

LT. COL. R. N. ROLLASON, *AUS*, retired (page 74), commanded ammunition and maintenance units in Assam and Burma, was on the faculty of the Ordnance School, and in the Office of the Chief of Ordnance was deputy chief of the Military Organization and Planning Branch and of the Field Service Division.

LT. COL. JOHN C. KEELE, JR., *Medical Service Corps* (page 76), at the time he collaborated on this article was executive officer of the 55th Medical Group. His collaborator, SFC CHARLES W. BAXTRESSER, who has served with many medical units in Europe and CONUS, was information specialist for the Group.

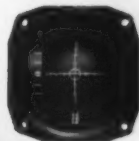
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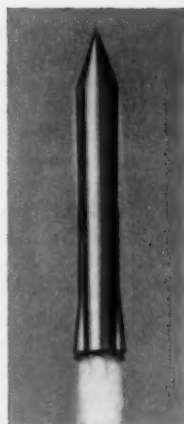
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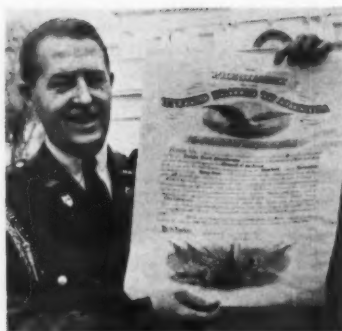
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ARMY

front and center

GEODETC DUTIES ASSIGNED SERVICES



Five-star rank was restored to former President Dwight D. Eisenhower with this commission signed by President Kennedy and displayed by Brig. Gen. C. V. Clifton, the President's senior military aide.

In a far-reaching decision by Defense Secretary Robert S. McNamara, the Army was assigned responsibility for establishment and management of a single geodetic and mapping program. Under this program, the Army will set up and maintain a world-wide master geodetic control system and a geodetic library, and will provide all geodetic data and maps required by the Department of Defense.

The same directive assigned to the Air Force all responsibility for research, development and operation of all DOD reconnaissance satellite systems as well as R&D of all instruments and equipment for processing recon data received from these satellites.

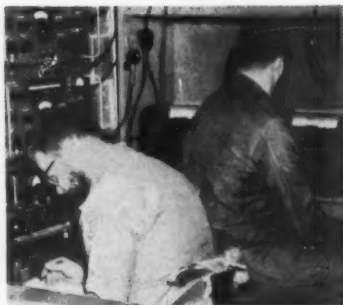
The Army will provide specifications for developing mapping and geodetic satellite payloads and the operational coverage required for its data collection program.

In this cooperative effort, the Air Force will provide, launch, and recover the payloads, delivering the collected raw data to the Army which will be responsible for its processing. The Air Force will also provide all manned high-performance aircraft required to furnish the Army with cartographic and geodetic information.

An additional Army responsibility is R&D and operation of ground-based mapping and geodetic systems (including components aboard, instrumented probes and non-geodetic satellite systems), and associated data processing instruments.

In the tri-service program the Navy was made responsible for R&D and operation of all oceanographic survey operations; and providing processed data required by the Army.

Priorities under the newly established program will be set by the Joint Chiefs of Staff.



Alabama National Guardsmen check radio communication in command post which doubles as fallout shelter for their families. Beards are for Civil War Centennial.

ALABAMA GUARD READIES SHELTERS

The Alabama National Guard, taking a realistic look at the possibility of a national disaster, is making it easy for its members to perform their missions by removing a prime worry from the minds of its men.

It is providing shelters for approximately 51,000 Guardsmen and their families, and it's not a "paper tiger" but a project in being and being steadily improved.

Carefully planned by the staff of the State's youthful Adjutant

General, Maj. Gen. Henry V. Graham, the project provides for fallout shelters complete with minimum daily food and medical requirements for two weeks. Nothing seems to have been omitted, from candles to cooking pots.

The shelters also serve as statewide National Guard command posts complete with safe water sources and independent power for lighting and the command communications network.

QUARTERMASTER SCIENTIST HONORED

Dr. Ralph G. H. Siu, Technical Director of Research and Development, Research and Engineering

Division, Office of the Quartermaster General, has received a highly prized award for career

employees given by the National Civil Service League.

A recognized international scientist, the Hawaii-born employee is a leading mind in development of new materials, techniques and equipment for modernizing the U. S. Army. He has also extended his leadership to application of scientific improvements in supply methods.

Dr. Siu's specific field is research in radiation methods of preserving food and he has served as technical advisor to the Con-

gressional Panel on the Peaceful Uses of Atomic Energy and to the National Academy of Science. He has written many outstanding articles as well as leading scientific books, and has traveled widely throughout the world in the interest of the Atoms for Peace Program.

A graduate of the University of Hawaii and Cal Tech, Dr. Siu is a member of the American Chemical Society and the American Association for Advancement of Science.



Dr. Ralph G. H. Siu

SAVINGS SET IN SEVENTH ARMY

A graded schedule of increased savings by soldiers, from private to general, has been set up by the Seventh Army in Germany.

Lt. Gen. Garrison H. Davidson was the first to sign the pledge of the "Order of Gold Patriots" which has the aim of reducing dollar expenditures during 1961.

Chapters of the Order are organized at each headquarters in Seventh Army to include companies, batteries, troops and detachments. Chapter members are pledged to save more dollars through savings programs graded

to their incomes, and to buy less on the local economy. Upon signing the pledge, chapter members receive a wallet-size membership card signed by General Davidson and the local chapter officer.

Members must pledge to increase savings by investing additional monthly sums beyond their monthly savings program as it was at the first of this year; to reduce monthly spending in Europe by a self-designated sum; to use approved dollar agencies as much as possible, and to retain the bonds they buy.



Savings in Seventh Army are a family affair. Backing up Lt. Gen. Garrison H. Davidson, Army Commander, as he signs pledge to reduce overseas dollar outgo, are daughters Gail and Linda.

UNWANTED AMMO STORAGE SITE

Although ordnance disposal clearance of Kwajalein Island and harbor began in 1949, developments in the Army's Nike Zeus anti-missile missile program have prompted a speed-up and in recent weeks more than 87,000 pieces have been disarmed on the tiny atoll where Americans and Japanese battled in World War II.

Clearance is still going on. The Navy disposal team assigned to the job is continuing to uncover bullets, shells, grenades, bombs

and rockets in almost every size from caliber .30 to 16 inches. Much of the old explosives had lain uncovered until the Army began construction of the Nike Zeus test facility under the supervision of the Army Engineers, Honolulu District.

Kwajalein will be the site for final tests of the complete Nike Zeus system when Zeus will be fired from the island to intercept Atlas intercontinental ballistic missiles fired from California.



In the dead of winter at the Ordnance Corps Climatic Test facility at Fort Churchill, Manitoba, Canada, PFC Jerry Podlin makes some post-firing notes on an 81 mm mortar test. This is only one of Ordnance Corps far-flung environmental test facilities.

EUROPE AIRLIFT UPPED

More tactical airlift is on its way to Europe under an Air Force plan to keep 16 additional C-130s at Evreux Air Base, France.

The first planes left from Sewart Air Force Base, Tenn., in April and the second increment is

due at Evreux this month. Under the plan, squadron strength will be maintained by rotating aircraft and crews, plane for plane, from Sewart to Evreux. Eventually, six Tactical Air Command squadrons will participate.

Caterpillar... Capability in power

Research

Research of the components and vehicles we manufacture is only part of our research effort. It extends into materials and techniques used in manufacture, as well as lubricants in cooperation with major oil companies, tire materials and design with leading tire companies and many other areas affecting machine reliability, life, and performance. The objective: to improve the complete operating vehicle. Today, at Caterpillar, 1500 people are engaged in metallurgical, fluid mechanics, applied mechanics research, to cite a few continuing basic studies.



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Ground Pressure: 4.4 lbs. per sq. in.



Horsepower: 560.
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Designed and built for Ordnance.



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Before designs are produced, three steps are taken: (1) design approach is proved by evaluating research findings; (2) preliminary production design is made to determine manufacturing and maintenance feasibility; and (3) final design is made to include changes and improvements indicated by first two steps. Thus military requirements are met in a controlled research, development, and production environment.

Proving grounds totaling 10,000 acres enable testing of military and commercial machines under all conditions of terrain and climate.

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The President's Intent: Control of Arms

The most important element of President Kennedy's defense budget message of March 28 has been overlooked. What received most attention was the addition of \$1,856,800,000 for strengthening and protecting our strategic deterrent and \$847,200,000 for strengthening the ability to deter or confine limited war, together with the details of how these funds were to be spent.

But the real import of the message was that the "purpose of our arms is peace, not war." All of the eight basic policies were concerned with how arms were to be used to preserve peace and with civilian control of these arms so that our policies would not be provocative and so that the danger of accidental, irrational or unpremeditated war would not be provoked by our attitudes and actions.

The United States has never been, in a technical military sense, in so great danger as today. It is also that the incalculable results for both sides of a thermonuclear war make full-scale war improbable, unless there is a long period of growing and almost intolerable tension.

To remove any doubt about our intentions in the present unstable condition, and thus to promote psychological stability, even though the technical military problem has not changed, the President announced as one of his basic policies that "our arms will never be used to strike the first blow in any attack."

Another basic policy, readiness for non-nuclear limited war, is also intended to make the threat of all-out nuclear war, or of limited nuclear war, unnecessary. "Our objective now," the President stated, "is to lessen the incentive for any limited aggression by making clear what our response will accomplish."

The President's basic policies are intended to accomplish two more important things: firstly, to insure that the President will always be in a position to determine our response to any threat or attack and, secondly, to reduce the danger of irrational or unpremeditated general war.

The first of these policies is stated as follows: "Our arms must be subject to civilian control and command at all times, in war as well as peace."

This sounds like a cliché, but this time the statement has real meaning. The President explained that for all decisions to be made by civilian authorities requires "effective and pro-

(Continued on page 28)

Ask What You Can Do

As President Kennedy told us in his State of the Union Message, the American eagle holds the olive branch of peace in one hand, and the arrows of war in the other—and our national strength is capable of fulfilling the promise of one or the necessity of the other.

One of the prime missions of the Association of the U. S. Army is to keep all Americans aware of the fact that one of

those arrows is the United States Army—the very bastion of our national defense and free society. When we raise our voices to assert this,

A message for members of AUSA by

Lt. Gen. MILTON G. BAKER

President, Association of the U. S. Army

we do so from the profound conviction that the United States Army must never be relegated to second place.

An important part of this mission is the preservation of the morale of the officers and men of the United States Army. It is commonplace for most people to judge the strength of an Army by the extent of its arms and manpower. You know that this is not entirely so. You know full well that the caliber of our military posture depends upon the attitude and morale of the soldier.

To the prospective selectee, military service is all too frequently regarded as a necessary evil, rather than an opportunity to give something of himself to his country. This attitude cannot be corrected by a last-minute patriotic speech made by some community celebrity at a "send-off" luncheon. Within their limitations, these affairs are all very well and good, but, in a very real sense, they come at too late an hour to be effective.

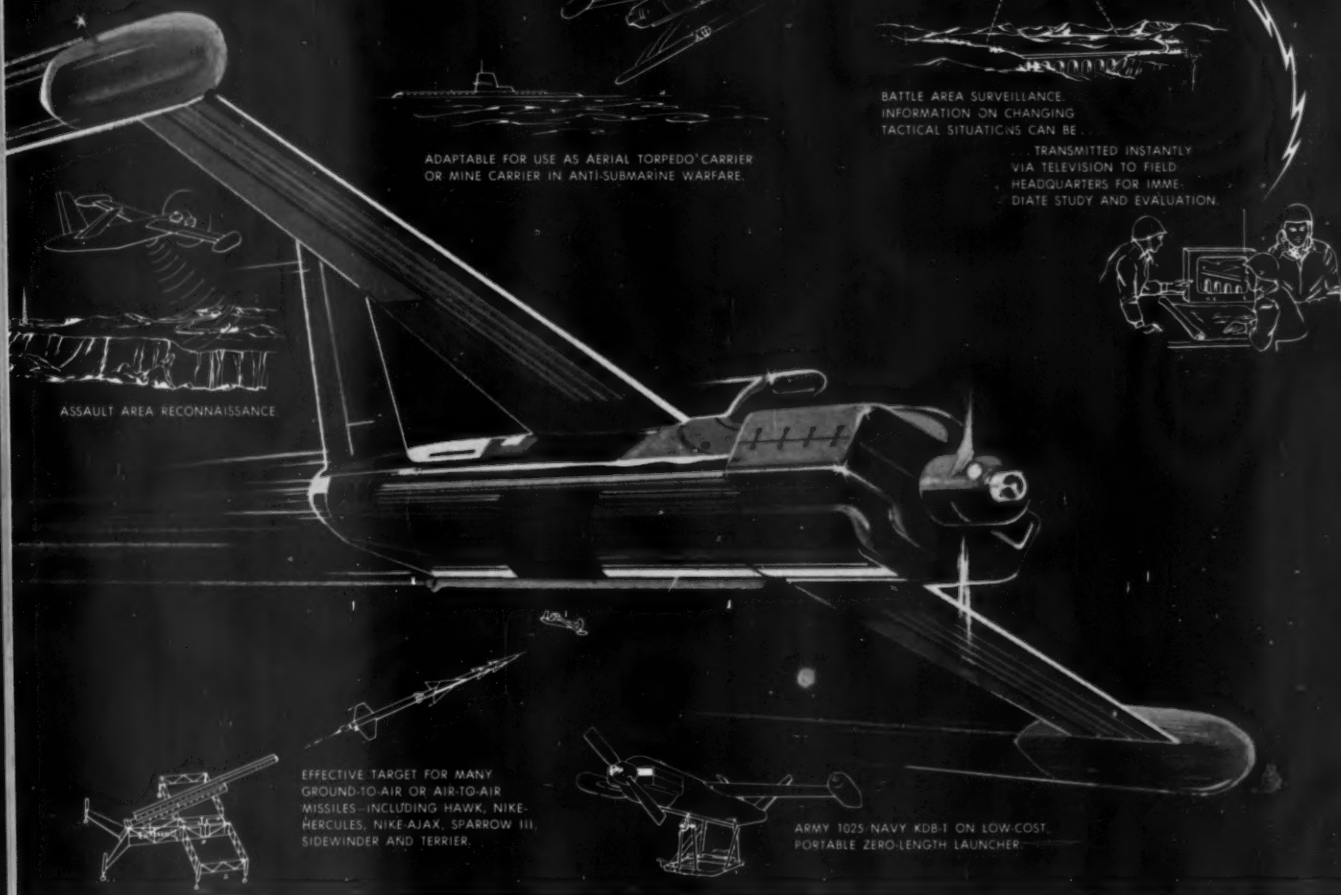
An awareness of responsibility toward this military duty should be implanted in the boy's first year of high school and made a continuing part of his education. He should be projected against the panorama of American history, and challenged to make himself a vibrant part of his times.

This presents a great challenge and a great opportunity to each of us, as members of this Association. Through our individual affiliations with churches, schools and civic organizations, we can work together to create a better atmosphere of patriotism.

I often think of the immense potential which our television and motion picture industries have allowed to go to waste in this respect. The pages of our history are replete with gallantry and courage, every one of which would make a memorable experience for our young people. Yet the skills of these motion picture and TV writers and producers with, unfortunately, the approbation of "big industry" sponsors in the case of television, are turned into channels of crime, horror, and an endless procession of quick-draw cowboys.

So here you find a partial answer to the attitude of many of our young men as they embark on their military service. Un-

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fortunately, they have never been taught that Liberty and Freedom are not like old family heirlooms that can be passed on from one generation to the next, but rather that, if they are to be preserved, they must be jealously guarded and fought for if need be. This, I know, is something of an ancient cry. But, if the youth of America is to be awakened to a fuller appreciation of its patriotic responsibilities, a beginning must be made and made quickly.

I do not hold with armchair critics who are content to condemn the younger generation out of hand. My own experience in the training of young men has taught me to respect the fact that every one of these young people has the seeds of greatness in him if only his elders will take sufficient time to help him develop them.

Our Association is equally concerned with the welfare of the career soldier, because he is the backbone of the Army. I was delighted to learn the other day that there has been a steady increase in Army re-enlistments. While the trend has been of too short duration to warrant exultation, it is nonetheless a very heartening sign.

The professional soldier is a true volunteer, and he deserves every consideration which we, as an Association, can extend. Here again we can be of a dual assistance: by supporting and encouraging programs which will make the Army an attractive career and by urging our fellow citizens to accord the soldier the respect and confidence that are his due.

It will take very little effort for each of us to pay tribute to the officers and men of the Regular Army who have made the defense of America their life's work.

This leads me back to President Kennedy and to those memorable words of his Inaugural Address: "Ask not what your country can do for you—ask what you can do for your country."

As I have suggested here, one of the things we can all do is give unstinting support to the Americans who form that bastion of national defense—the United States Army.

Cranking Out the Decisions

It is not easy these days to say that this or that defense question should be answered by military experts, space wizards, management experts, political scientists, or some other esoteric branch of knowledge. That it is the intent of Secretary McNamara to use them all, singly and in combination, can be deduced from the compositions of the special task forces and committees that have been given the 106 or so questions with instructions to come up with answers fast. It is this spectacle of men-in-a-hurry that raises doubts as to whether the answers that have been and will be forth-

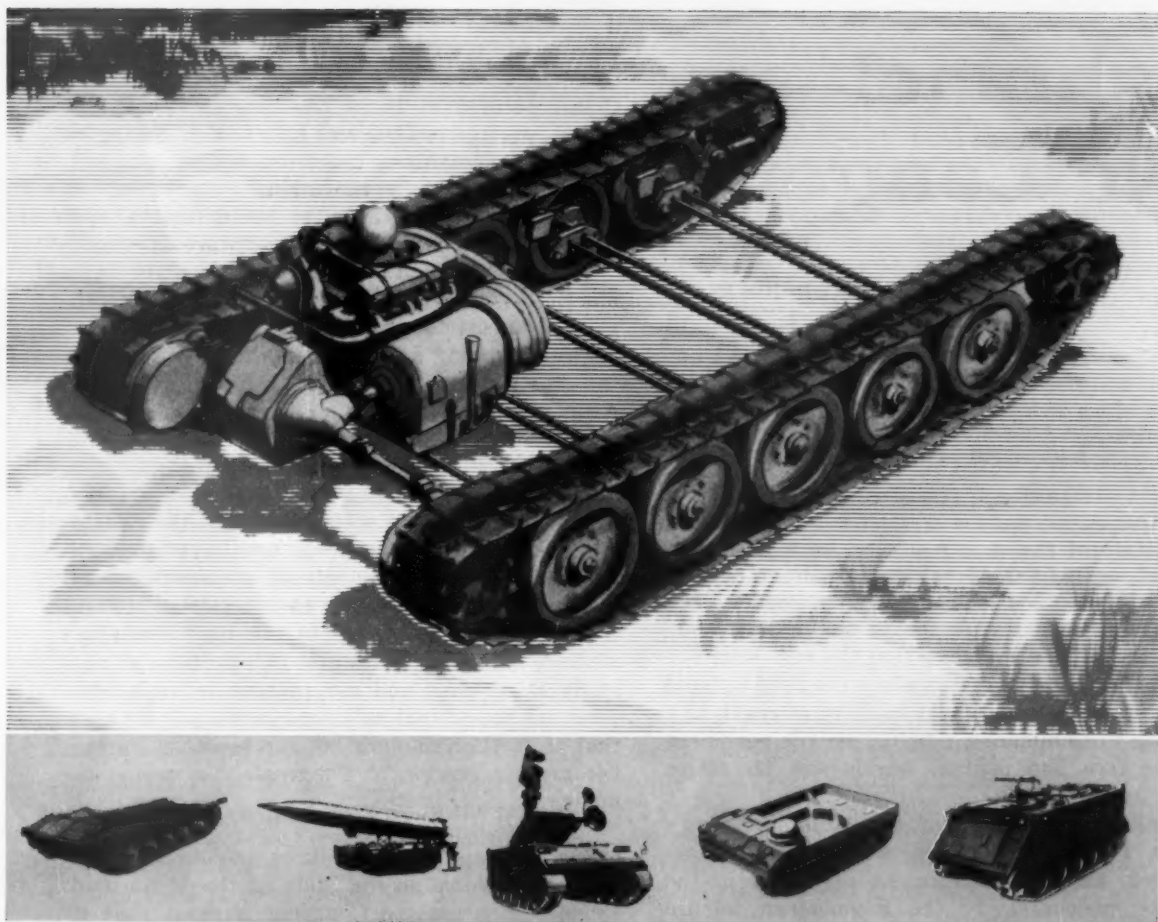
coming are given the consideration they should receive and whether the opinions of the military are being shunted aside in the interests of fast action. These are questions not easily answered.

The inability of the three services to agree on many of these matters is an old story, and this knowledge may be largely responsible for Mr. McNamara's determination to drive ahead with full military concurrence if he can get it, without it if he has to. It is very difficult to argue against this because it is of vital interest to the United States that decisions be made so that work can progress. But at the same time, the cost of disregard of essential military (or essential scientific or political) advice could be high.

In formulating policies to be pursued at the United Nations, at Geneva, and in conferences with the heads of allied, neutral and communist states, a President today must have advice far beyond that available from the foreign service and the military. He needs scientific advice of the highest order. He must have many experts in the field of psychological warfare. National strategy today is much more than the determination of how much military force is required and where and how to apply it. In this cold war in which the objective is to deter and stop aggression and if possible to find an alternative to war, we should not be astonished that the influence of military expertise is diminished.

It is incontestable that there is a great deal more military and quasi-military expertise among American civilians today than ever before in history. This, on balance, is all to the good and we of the military, who for generations have been saying that civilians had no interest at all in military security, should now be shouting hosannas. But what these men lack is the technical expertise that comes from practicing, rather than studying, a skill, a craft or a profession. A man who has read the law may have great knowledge of jurisprudence, but if he has never been in a courtroom he has little knowledge of how to conduct a case. A man who has not commanded a destroyer, an air squadron or a battle group lacks the intimate feel for the military requirements of a fleet, an air armada or a field army that is essential to success in war.

Civilians who have studied and thought diligently on the problems of war and peace, who understand atoms and space science, who know how to make a large organization effective, are contributing much to American security today. But there are limitations that they should recognize. It is understandable that there is some concern but little real evidence that civilian control is running amuck. Too complete a disregard of military know-how could imperil the security of the United States.—J.B.S.



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Putting Ideas to Work



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Ishmael No Longer

A new strategy that holds great promise of positive gains in cold or hot wars is a challenge and an opportunity for the Army. But first it must receive the fiscal approval of the Congress

After an eight-year sojourn on the depressed fringes of national military policy, the United States Army, no longer calling itself Ishmael, is cautiously hopeful that the new Administration means what it says about the need to build up the nation's non-nuclear military strength as a counter to Communist nibbling on the periphery of the free and neutral worlds and an active force for peace.

While the language of the Administration's intent is encouraging as well as exquisitely phrased, the performance, as displayed in the first supplementals to the Eisenhower defense budget for fiscal year 1962, is most moderate and as tentative as the cautious toe-probing of the temperature of a mountain lake by a bather with goose bumps.

This is demonstrated most strikingly in the proposed allocation of 5,000 more men to the 870,000 the Army now has. In weapons procurement, the Kennedy Administration proposes an additional \$96 million to be added to the Eisenhower allocation of \$1,426 million for a total of \$1,522 million—about a billion dollars less than the Army says it needs.

If there were some long faces in the Army's wing of the Pentagon when these small increases were announced, there were also some brave words about the Army nevertheless being on the

way back up. This was not entirely a case of whistling in the dark. The confident Indians and Chiefs pointed at those passages in the President's message to Congress that said this supplemental to Eisenhower's defense budget was but the first step in a continuing reappraisal of "defense strategy, capacity, commitments and needs in the light of present and future dangers."

"In what other peacetime period of sixty days has the Army ever made \$40,000 a day and with good prospects for more?" asked one Army colonel in reassuring a friend somewhat downcast at the smallness of the proposed increases in the Army's budget.

He may have been somewhat loose with his arithmetic but he was certainly on the same wave length as the President and of Defense Secretary Robert S. McNamara who was to tell the Senate Armed Services Committee a few days later: "I am well aware that the rate of modernization of our limited war forces has been a matter of controversy for some years. In the time available, we have not been able to give this problem all the study it requires and our present recommendations are not offered as a final solution." He said that if further changes became essential during the present session of Congress, they would be made.

The Administration's policies, as enunciated by the President in his State of the Union and Defense messages to Congress, suggest that it intends to make the nation's defense establishment an active force for peace, cranking into it some positive overtones that go beyond mere deterrence.

The President's strategic thinking seems to be in close accord with the known views of General Lemnitzer and General Decker. Briefly stated, this is a strategy that would provide a "second strike" nuclear capability (hardened Minuteman missiles and Polaris submarines); beefed-up conventional land, sea and air forces (plus a mobilization base of trained reserves) capable of waging nuclear or non-nuclear wars of all possible magnitudes; adequate air defense of the North American continent, including an anti-missile missile. (While the Administration didn't see fit to

Control of Arms

(Continued from page 24)

tested organization, procedures and communication" so that the civilian authority, the President, will always be in communication with and can control the military.

To provide for protected communications and organization, the President included \$16,400,000 in his budget recommendation. This, for the first time, will put the President in as secure control of the armed forces as

the commander of the Strategic Air Command, for example, is in control of his on the ground or in the air, through an adequate protected communications system.

Such control will eliminate the idea of automatic response and other dangerous ideas, such as delegating authority to commanders in the field, to respond to an attack, or an apparent attack, such as a shower of meteors resembling a salvo of missiles on the radar screens.

The danger of irrational or unpremeditated general war, the escalation of a small war into a large one, or of miscalculation or misinterpretation of an incident or enemy intentions, on either side, is very real. For the first time since the coming of nuclear weapons, an American President recognizes this danger and is taking steps to decrease it.

Brig. Gen. THOMAS R. PHILLIPS
The St. Louis Post-Dispatch

approve the Army's request to go into production on Nike Zeus, it did fully fund its development and it can be hoped that if the missile proves itself in the forthcoming Pacific tests, production will begin.

This strategy is clearly more promising than either the strategy of massive retaliation or that theory's principal counter—the "finite" strategy that holds that "enough is more than sufficient to deter the Communists." But the Lemnitzer-Decker strategy is also more expensive than the others.

It is here, of course, that the Kennedy Administration departs from its predecessor. The Kennedy Administration shows every sign of intending to march to the sound of the State Department's warnings and the President's very obvious desire to be a step ahead of his Communist adversaries. The long agenda of Defense task force studies all attest to the President's desire to create, not the cheapest possible military security, but a workable instrument that can win cold war battles.

To get the job done is going to be the work of years and will require not only new additions to the defense system but canny elimination of weapons that will not measure up to the requirements of the middle and late years of this decade. The shelving of the Navy's projected installation of a Polaris missile on a cruiser and the slow down in the development of the B-70 bomber are examples in point. It is difficult at this time to

view the B-70 as a "hardened" weapon that would have much use in the years when it would become operational. The cancellation of two squadrons of the Titan ICBM will be offset by the increase in Polaris submarines and the impetus given to the further development of the Minuteman system. Thus, our big weapons for retaliation will not be diminished now or in the discernible future.

Until a stronger and more flexible non-nuclear instrument is created, the level of terror can hardly be lowered without real danger to the Western world. Parts of the President's message to the Congress on the defense supplementals can be interpreted as an invitation to the Army to get on with this and come up with some workable ideas on how to improve the nation's non-nuclear posture. "Our objective now," the President said, "is to increase our ability to confine our response to non-nuclear weapons, and to lessen the incentive for any limited aggression by making clear what our response will accomplish."

In spelling out his views on improving conventional forces, he saw a need for "a greater ability to deal with guerrilla forces, insurrections and subversion." He noted that "much of our effort to create guerrilla and anti-guerrilla capabilities has in the past been aimed at general war." He wants it extended to be effective against all levels of aggression.

Technology, he said, "promises great improvements in non-nuclear armaments." He saw a need for "entirely new types of non-nuclear weapons and equipment—with increased firepower, mobility and communications, and more suited to the kind of tasks our limited war forces will most likely be required to perform." In a later passage he noted that "important new advances in ammunition and bombs can make a sizable qualitative jump in our limited war capabilities."

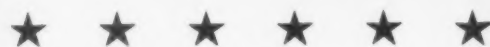
Unlike the years when a Secretary of Defense said that any war we fought would be a big war because we couldn't afford to fight any other kind, these sentences suggest that the President has altogether different ideas and is looking for someone to come up with fresh new ways of countering non-nuclear aggression. Since this is an area in which the Army has long maintained that it has a special competency, the challenge seems rather direct.

The President has made his first moves in this direction and Congress now has the task of giving them force by voting the appropriations. That the President will get what he wants seems a reasonable guess since he really hasn't asked for too much. Yet throughout the country and within the Congress, the big weapons of thermonuclear war have a fascination that is peculiarly American. A job of re-education is in order and the President has made a good start.—J.B.S.



Conrad in *The Denver Post*

Bedcheck



Point's

One route on the road from Army green to Cadet grey and back to Army green leads through West Point Prep. Here's the routing and some of the scenery

CHARLES A. DODSON

FORT BELVOIR, VA.

WHAT are the odds that the future commanding officer of Lunar Base I is among the 200-odd clean-cut, hard-muscled young men now studying at the United States Military Academy Preparatory School?

Determined to join the Long Grey Line at West Point, they make it on the double from first call at 0550 to the close of study hall at 2130 hours for as intensive a nine-month course as military experience and trained educators can devise.

Already strongly attracted to a military career, each of these superb young mental and physical specimens is never allowed to lose sight of his goal to reach the Plain above the Hudson, Trophy Point, Flirtation Walk, and eventually golden shoulder bars.

One would be hard put to describe the typical cadet candidate; an overall impression must suffice. He averages less than a year of military service but his uniform is clean and neatly pressed, his brass gleams and his footgear is spit-shined. He has sat in a barber's chair very recently. He has used a razor this morning. He is





in Their Eyes

a little heavier and has better muscular control than the average high-school graduate. He is over 17 and under 22. His voice and enunciation are clear and there's a decisive ring. His face is *alive*—no Elvis-Ricky-Nick deadpans on these young men. Best, perhaps, of all, he's faster on the draw with his slide rule than with his comb.

Cadet candidates vary in rank from recruit to sergeant or specialist fifth class but may not be promoted above the grade of E-3 while at the school. Insignia of rank may be worn only during off-duty periods.

A man may not enlist specifically for the school but any eligible enlisted man is entitled to take the Army-wide competitive examination. Failure at the school does not excuse a soldier from completing his military obligation. There are no quotas for field armies or commands, simply an army-wide competition which places the best-qualified candidates at the school.

Discipline is strict. Entering the prep school area, one almost feels

that he has walked onto the campus of a service academy. It speaks well for the Cadet Candidate Company that of the 75 men eliminated from some 300 who began the class of '60-61, only one was for misconduct. (The school doesn't even refer to it as misconduct but rather as "lack of military aptitude.")

Located in the "old" hospital, vacated in favor of the new DeWitt Army Hospital at Belvoir, the candidate can pursue almost all normal activities under one roof. Here, however, "under cover" does not apply since salutes and other military amenities are required in the corridors.

The mission is simply stated but the accomplishment of it is a full-time job for the school's four officers, 28 enlisted men and 23 civilians. This mission is: "To fully qualify, to the best of the school's ability, the maximum number of candidates for entrance to the United States Military Academy and the United States Air Force Academy; to eliminate candidates who are obviously undesirable, and to provide training which will assist cadet candidates in successfully graduating from the USMA."

The four officers are selected with painstaking care at Department of the Army by this method: the Office of the Deputy Chief of Staff for Military Operations (which is responsible for the school) sends its requisition through the Office of the Deputy Chief of Staff for Personnel which screens officer records and submits a list, drawn from the combat arms, of best qualified officers. DCSOPS then carefully screens these records to come up with an officer for the assignment who is outstanding in his grade and branch.

Of the present officer staff, three are U. S. Military Academy grad-

Commandant, left, and assistant work out "school solution" to problem posed by cadet candidates for the USMA



"Sum of the square..."

Cross-body press



Name's the same

Black Knight's gambit?



West Point Prep



uates while the fourth is a distinguished ROTC graduate who holds a Regular Army commission.

Current commandant of the school is Major Joseph D. Park, Infantry (USMA '46), a Purple Heart veteran of the Korean War. Major Park came to the school last year after graduation from the Command and General Staff College at Fort Leavenworth. Assistant commandant is Captain Herschel E. Chapman (USMA '50) who is also an Infantry officer. The training officer is Captain Jack M. Berringer, Armor (USMA '54). Tactical, supply and mess officer is First Lieutenant Phillip E. Custer, Corps of Engineers, a 1956 ROTC distinguished graduate from the University of Idaho.

The backbone of any military unit is its non-commissioned officers, and the prep school is no exception. Sergeant Major William D. Massey, with 23 years of service, is "the man who knows *all* the answers," and First Sergeant Gene L. Neff, who moved up after being training NCO for three years, has more than 10 years service and is a 2d Infantry Division veteran of the Korean War. In the military training department the non-commissioned officers are, according to Captain Chapman, "hand-picked by us from the ranks of young, experienced Regular Army platoon sergeants."

Headed by Mr. Raymond W. Coolidge, who has been with the school since 1945, the 15-man academic faculty is recruited by Civil Service from the ranks of outstanding secondary school educators. They have much more than their regular Government pay checks to be thankful for. The instructors have, in effect, a high-caliber captive student who attends classes to learn and is not hampered in his "homework" by the thud and blunder of TV westerns or a hi-fi pounding more



Sound bodies make sound leaders. The "inner man" contributes, left, to the "whole man" at the Prep School. Formations permit students to practice com-



Presley than plane geometry into his head. The instructor is there to teach as his sole responsibility and has no truck with PTA, cafeteria funds, school photographs or chaperoning proms.

Academic emphasis is on English and mathematics. Each department has a seven-man staff supported by a clerk.

The English department, headed by Mr. William D. Williams, presents a broad program of language instruction and literature ranging from Beowulf to Henry James. Heavy emphasis is placed upon theme writing, for the cadet candidate must learn to express himself clearly through the written word. To this end he receives intensive instruction in the mechanics of English grammar as well as the literary side. (The cadet candidates claim that a favorite lament of one instructor is: "Don't they teach English in high schools any more?") He and his associates make up for the lack.

On the math side—Mr. Robert O. Barnum is department head—the candidates get more than

a passing look into algebra, plane and solid geometry, trigonometry, and the use of the slide rule.

Instruction is conducted in 16 classrooms with a maximum of 24 candidates per section. Sections are arranged in order of academic standing, allowing greater effort to be expended on those who have the greater need.

In addition to daytime supervised study, each candidate undergoes a minimum of two and one-half hours of supervised study on evenings prior to classes. (An exception to this rule is the candidate who maintains a consistently high average in all academic subjects.) Candidates having difficulty may be given an additional two hours of special help on Saturday mornings.

Hidden well down in the rules set forth for military training is one significant sentence: "No breach of discipline, however minor, will go uncorrected." There is small chance. In addition to the assigned staff of officers and noncommissioned officers, the candidates themselves correct each other through their own armband officers, first

mand as, below, a candidate sounds off cadence en route to the gym. Military precision, right, is part and parcel of physical exercise for men of the USMA



West Point Prep



En route to classes, students carry work in neat issue bags. Candidate at right wears acting corporal armband

sergeant and noncommissioned officers. The position of cadet candidate company commander changes every three weeks, and the company commander is selected both on the basis of academic standing and demonstrated leadership ability. The school commandant says it would be highly desirable to give each candidate a crack at the job but that the school term permits only the most outstanding to fill the position. Each candidate, however, is afforded an opportunity to serve in one or more positions of authority in an effort to "develop to the maximum his inherent potential for command and leadership." In addition, three times during the school year each candidate is rated by his peers who know him. The school commandant calls these ratings "surprisingly candid" and "a valid evaluation."

In keeping with the "whole man" concept that applies at the service academies, the physical well-being of the candidate is not overlooked. Against 915 hours of academic work during the school year, candidates are required to take 300 hours of physical training. The program of instruction makes note of the need to meet and maintain the standards necessary for accomplishment of the physical aptitude entrance examinations. "It is imperative," say school authorities, "that the cadet candidate, upon the completion of his course of instruction, be in top physical condition to satisfactorily complete the first few months at the U. S. Military or the U. S. Air Force Academy."

Physical training is by no means confined to "The Army Dozen." The prep school is proud of its basketball team which competes in the post league at Fort Belvoir and against outside schools. Other sports include lacrosse, handball, volleyball, golf, tennis, squash, track and flag football.

Post recreation facilities are open to the candidates, allowing them to pursue hobbies, withdraw books from the library and attend service club dances and parties. The school also sponsors two formal dances each year.

Nor is the inner man neglected. An outstanding military mess staff under SFC Lavren C. Cook turns out tasty meals which are served cafeteria or chow-line style and eaten at four-man tables in the tastefully decorated dining room. Wednesday is usually "steak day" and it's then that visitors, including chaplains and other friends of the school, are most likely to drop by.

For the non-political appointee soldier the road to the service academy is rocky, but by no means impassable. Competition is the keynote for there are always more applicants to the Academy than there are spaces. Of 800 soldiers who took the Army-wide entrance examination, the 100 top scorers made it to the school for this session.

The competitive route to a commission through

Staff and Faculty of West Point Prep Is Selected Carefully



Maj. Joseph D. Park
Commandant



Capt. Herschel E. Chapman
Assistant Commandant



Capt. Jack M. Berringer
Training Officer



Lieut. Phillip E. Custer
Tactical Officer



Sgt. Maj. W. D. Massey



1st Sgt. Gene L. Neff



Mr. Raymond W. Coolidge
Academic Director

the U. S. Military Academy works this way. At any given time the Corps of Cadets, generally equally divided among the four classes, may include 90 men from the Regular Army and another 90 from the reserve components. The President of the United States may nominate sons of Regular Army personnel to fill a quota of 89 which may be enrolled in the four classes. Sons of deceased veterans may compete for 40 spaces at West Point and honor graduates from military schools may also compete for 40 Academy spaces. This means that the number making it to the Academy is based upon the openings created by graduation and eliminations. Applying a rule-of-thumb, it can be estimated that a little more than one-fourth of the 90 each from the Regulars and Reserves will be in the next plebe class.

Noncompetitive nominees to the Academy come from these sources: Senators, four each; Representatives, four each; Vice Presidential, three; District of Columbia, six; Canal Zone Govern-

ment, two; Puerto Rico, four. Sons of Medal of Honor winners are unlimited.

It might be noted here that while the preparatory school is primarily designed to help the soldier coming up from the ranks, the non-competitive nominee may apply. If he successfully meets the Academic screening criteria, he may be selected to attend in order to better fit himself for the examinations which must be passed prior to entrance to a service academy. He must be in the military service and he, too, must fulfill his military obligation.

Filling out the ranks at the preparatory school are some 75 Air Force cadet candidates for the Air Force Academy. Since the Air Force has no such school, the Army schools one-third of its candidates while the Naval Academy Preparatory School at Bainbridge, Md., takes care of the other two-thirds.

The preparatory school has slight resemblance to the Army's officer candidate school which deals

West Point Prep



almost entirely with military subjects. The prep school course consists mostly of academic and physical training, only the basic military subjects are included.

Reasons for elimination from the school are varied and each March sees some 75 or 80 "washed out" prior to the college entrance examinations. One of the main causes, of course, is academic failure. Some disqualifying physical conditions are detected after arrival at the school. Others go out for lack of military aptitude or motivation to a military career and a few resign in favor of wedding bells or other personal reasons.

The three-day March examinations, which consist of the standard college entrance exam, is the payoff that eliminates even more of the candidates, both competitive and noncompetitive.

For those who pass, again the "whole man" concept enters the picture. The U. S. Military Academy makes the final selection to fill the existing quota. Selection is based upon the preparatory school record, recommendations of ministers,

teachers and civic leaders, and other personal criteria such as strong leadership shown in school and community activities.

For men who fail to obtain a space at a service academy, the time spent at the preparatory school could by no means be considered wasted. The academic lessons learned and the military discipline instilled at the school is of great value should the soldier seek a commission via another route. They are also a sound base upon which to further his education at a civilian institution.

There is considerable evidence that many capable young soldiers with Military Academy potential are unaware of this route up from the ranks. Commanders of all units, from the largest to the smallest, would be doing the Army a great service by keeping a critical eye cocked for such men and familiarizing themselves with the provisions of the regulation (AR 350-55) covering nominations.

General requirements under the regulation are:

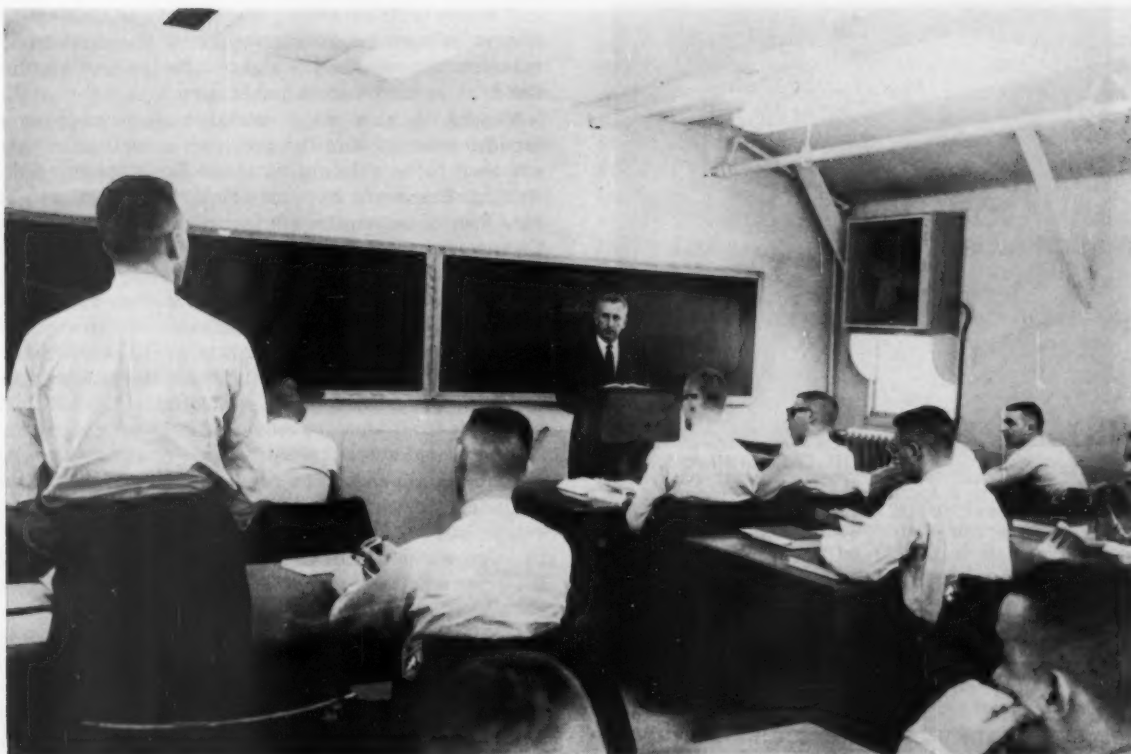
Applicants must have reached their seventeenth but not their twenty-second birthday by July 1 of the year of proposed admission; that is, July 1 of the year following that in which the application is submitted. Age is a legal requirement and cannot be waived.

Applicants must be United States citizens, evidence of which will be required of those selected.

Applicants must be unmarried; anyone who has ever undergone a marriage ceremony is ineligible.

The social graces are not ignored in the making of the "whole man." In addition to cadet candidates being allowed to attend post service club functions, the preparatory school sponsors two formal dances during the school year





English gets heavy emphasis at the Prep School. Here a cadet candidate untangles poetry which has been "scrambled" to give students exercise in English literature. Prep School candidates do not wear uniform coats during classroom sessions

Applicants must have at least a high-school education or its equivalent by the date of admission to the Military Academy. Education should include mathematics (two years of algebra, and one year of plane geometry), three years of English (including literature) and United States history. A soldier having credit for a high-school education as a result of a GED test meets the educational requirements.

The applicant must be of high moral character. The application of a soldier will be disapproved when his records evidence convictions by court-martial for violations of laws other than minor violations of the Uniform Code of Military Justice, conviction of a felony in a military or civilian court, a history of venereal infection, or habitual intemperance.

All applicants must possess the capacity for leadership required of officers. Too, they must have a strong desire for a military career.

Under law, persons admitted to the Military Academy under the Regular or Reserve quota must have completed one full year of active service in their respective component by the date of admission (first Tuesday in July) and must be in an enlisted status in that time. Service need not have been continuous.

For almost 50 years, the U. S. Army has helped

soldiers who wanted to rise from the ranks to West Point—at post level, in corps areas, and during World War II at Amherst College, Lafayette College and Cornell University. In June, 1946, the Preparatory School was established, under the direction of the Superintendent of the U. S. Military Academy at Stewart Air Force Base, N. Y. It was moved to Fort Belvoir 1 July 1957.

Since 1947, 20 percent of the graduates of the United States Military Academy have previously attended the Preparatory School and have, according to school authorities, "occupied a disproportionate share of the more important positions in the chain of command of the United States Corps of Cadets." Up-from-the-ranks Horatio Alger stories are numerous in the U. S. Army and among current commanders who attended a West Point preparatory school is, appropriately enough, Major General Walter K. Wilson, Jr., Commanding General of the U. S. Army Engineer Center at Fort Belvoir—home of today's West Point Prep.

It may be straining a point to call the ranks the minor league of officer potential, but it is from these outfields that many of the future Mickey Mantles of military operations may make the majors—and colonels and generals, too.



THE BETTMANN ARCHIVE

Herodotus, Greek historian of the 5th Century B.C. and Thucydides, Greek historian of the golden age. Double picture of a statue after Bernanli.

THE WRITING OF OFFICIAL HISTORY

His bosses may be suspicious and his professional colleagues may be skeptical, but if he remains true to himself and to his profession, the official historian can help man better understand the evils of war

Dr. Louis Morton

This view of the trials and triumphs of official military historians is drawn from the remarks by Dr. Morton at the annual meeting of the American Historical Association in New York City early this year. The author, a former official historian in the Army's Office of Military History, is now teaching at Dartmouth College.—THE EDITORS.

ONE need not minimize the accomplishments of the Army historians or the great contribution made by Dr. Kent Roberts Greenfield and his associates in the Office of Military History to recognize that there are serious problems connected with the writing of official history and that these may have not been solved entirely. The fact that reviewers have praised the products of the Army's historical program does not, in my opinion, mean that we might not have had better books had the same authors written them as independent scholars.

To define official history solely in terms of government participation obscures rather than clarifies. I would define it as a history authorized by any institution, agency, interested group, or individuals; and one in which, as a necessary condition to the writing, that organization or group cooperates to the extent at least of providing financial support in one form or another

and access to its records. I would also add that almost always in such an arrangement the organization involved would reserve the right to review and approve the final product before publication.

Viewed in this way, official history requires a broader meaning and the problems associated with it are seen to be relevant to other forms of historical writing. One could have an official history of a business firm, a university, a labor union, or a foundation that would meet all the criteria mentioned above just as well as the official history of a military service or a government agency. . . . One might even venture to suggest that the restraints imposed on the official historian of a private organization would be more confining than those placed on the government historian.

The really critical questions we have to deal with here are: first, what price does the historian pay for the privileged access to records and financial support; second, what guarantees can he obtain to safeguard his independence? A notable illustration of such guarantees can be found in the conditions laid down by Dr. Greenfield before he assumed the post of Chief Historian of the Army. Not many official historians have been as successful. But however broad the guarantees, the official historian must still accept certain controls and restraints. This is the price he pays, and it usually includes restrictions on the use of the records, safeguards by his employer to insure that these restrictions are observed, and submission of the completed manuscript to review before publication.

These are ordinary safeguards any organization or group must take to protect itself, and they are not unreasonable, especially in the case of a government agency charged with national defense. Historians, after all, have no inherent right to records, public or private, and governments do not exist in order that historians should write about them. But from these safeguards, which apply to all outsiders, grow the elaborate paraphernalia of security regulations and clearance procedures with which the official historian of government activities must cope.

In addition, there are other less tangible safeguards that protect the organization or agency: patriotism to the nation or loyalty to the company, identification of the historian with the institution and its directors or leaders, the tendency of the historian to reflect the point of view of the records to which he has access, personal relationships with management and supervisors, and, finally, self-interest. To pose the question of objectivity in terms of the financial relationship between employer and employee, to picture censorship as arbitrary action by a military autocrat armed with a red pencil, is to over-simplify. These are the crude methods of an earlier day; there exist today more subtle ways of insuring that the work of the historian will be sympathetic to its subject. To understand these, one must look very closely at the recruitment programs of the official historical program and at personnel and promotion policies; one must scrutinize the organization and procedures under which the histories are written and reviewed, distinguish between the form and substance of authority, find out who writes the efficiency reports on the historian, and whom he must consult during the planning and writing

of the history. The prerogatives and pressures that can be exerted by supervisors, advisers, review committees, panels, editors, and the like can over a period of time produce results much more effectively than any achieved by the older methods of direct censorship. And in the final analysis, direct methods may still be used if all others fail.

Censorship comes in many forms, and the official historian must be ever on guard against it from whatever direction danger threatens. But the most subtle censorship and the one he may be least prepared to meet is the censorship he exercises on himself—"auto-censorship," we might call it. This kind of censorship arises from the privileged access the official historian enjoys to a unique body of records, usually classified, and from his identification with the institution and its leaders. . . . There is a tendency also for the historian working from a single body of records that reflect an institutional or agency point of view to acquire that point of view as his own.

These pressures react on the official historian in varying degrees and on different levels. They are the conditions all official historians work under, and wise professional supervision seeks to neutralize them in various ways. But a large organization, by its sheer weight and size, by its impersonality, has a long-range effect difficult for any single person to overcome. Any historian operating within a bureaucratic framework, who knows that every word will have to be reviewed, whose position, prestige, and advancement depend on the good will of his superiors, cannot but feel some constraint to his freedom of expression. There is a basic conflict of interest here between the historian and the official; the one seeks complete freedom to write what he wishes, the other seeks to restrict this freedom for a variety of reasons. One is almost tempted to assert that the natural state of affairs between the historian and the official, as between the faculty and administration of a college, is one of tension and conflict. When harmony prevails, when one lies down with the other, then there may indeed be cause for alarm. After all, what better guarantee does the academic historian have that the interests of historical accuracy and objectivity are being served than in the clash of arms between those who represent him and Truth (as he sees it) and those whose concern is to safeguard the records and reputation of the institution. He cannot examine the record himself; he must take the official historian on faith. He needs every assurance, therefore, that his interests will be fiercely defended, and he has every right, even the obligation, to remain skeptical and ever on guard.

This attitude explains in part why the official historian is so often regarded with suspicion by his academic brethren. Having been the object of this suspicion when I thought myself to be at least as pure as the next man, I am not sympathetic to this view, though I understand it better now. It is an occupational hazard that feeds on a genuine concern for objectivity, accuracy, and honesty. Official history demands of the academic historian what he does not lightly give—acceptance of the facts without the opportunity to examine the evidence himself.

This attitude of suspicion is reinforced by the fact

that official military history has its origins, not in the academic world like other branches of the subject, but in the general staffs of Europe in the early nineteenth century. Its purpose was to derive practical lessons from the study of past wars as a means of educating the professional soldier, and its preparation was the function of staff officers. Only later, in the last part of the century, was its purpose broadened to include the enlightenment and education of the reading public. Thus, military history through World War I, with certain notable exceptions, has been considered the province of the professional soldier and has been concerned largely with the study of battles and campaigns. Even today, it retains this character and is presented in military schools and in the ROTC as a vehicle for instruction in tactics, for illustrations of the so-called principles of war, and for building esprit de corps.

The assignment of professional historians, working as civilians in historical sections that are attached to or part of the general staff, is a recent phenomenon, restricted largely to the United States and British programs after World War II. It is not surprising, therefore, that the academic historian should regard military history as an alien branch of his own discipline, as narrow and technical in approach, didactic in character, and unrelated to the broad stream of historiography. Suspicion of this type of history, associated as it is with the Great General Staff, was perhaps well founded in an earlier day, and it was to be expected that it would be carried over into our current attitude toward official history.

But military history, even when it is not official, is still regarded by the historical profession at large with some suspicion and skepticism. The reasons are to be found partly in its close association with official programs, partly in the uses to which it is put. But there is still another reason, less apparent but perhaps more important, and that is the traditional liberal, anti-military outlook of the historical profession in the United States. This outlook finds expression in many forms, in courses, textbooks, graduate training, research, and job opportunities. The net effect has been, until very recently, to create so unfavorable a climate for the study of military history as to discourage those who wished to pursue it, thereby leaving the field open to others perhaps less qualified by training and knowledge.

One can sympathize with those who feel that because war is evil and stupid, an aspect of human activity that were better left untouched, its study is therefore deplorable and even dangerous. If mankind had permanently abolished war as a means of settling its disputes, we could afford the luxury of such a view and leave the study of warfare to those concerned with the less savory fringes of man's activities, such as prostitution and other sins. But there is no sign that man has done with war, and the prospect for the future is even more ominous than the record of the past. It seems only common sense, therefore, that the historian in his study of the past should pay particular attention to war in the hope that thereby he may enlarge our knowledge of this worst of all social diseases.



Weather and terrain are grimly reminiscent of the 1944-45 winter in Germany, but troops find that helicopters afford the mobility and support U. S. soldiers sorely needed during the Battle of the Bulge. This time, during Exercise Wintershield II last winter, Yanks found themselves allied with Germans of the Bundeswehr

WINTERSHIELD

WAR IN A NUCLEAR CLIMATE



Captain ROBERT B. ASPREY

2 No matter what realistic gambits it employs, any training exercise suffers from artificialities. Time is always at a premium, which means that everyone works too hard, terrain is rarely sufficient for extensive maneuver, blank cartridges never import the real thing, and airplanes cannot transcend safety limitations.

Nonetheless men do march, they get hungry and cold and tired, orders are issued and executed, new weapons and techniques are evaluated and, in general, the best is done considering the circumstances.

Particularly was this the case in Wintershield II, Seventh Army's largest maneuver for Fiscal 1961 which was held during 2-8 February in southeastern Germany. Involving some 60,000 U. S., German and French troops, this maneuver was attended by a press corps ranging from 100 to 200 correspondents, observed by some 300 NATO officers including 180 generals, and umpired by several hundred officers and men—altogether a task force that meant heavy traffic in the tactical area and one for which the problem was interrupted in favor of a firepower demonstration. Adding to such difficulties was the maneuver area, 1,600 square miles of varied terrain, much of it privately owned farmland and government-pro-



Tanks of the 24th Infantry Division charge across the snow during Seventh Army's winter maneuver. The Taro Leaf division gave a massive firepower demonstration

tected forests, and thus open to damage claims. To minimize the number of claims and still allow extensive armor movement, the normally below-freezing month of February was chosen. The plan backfired because of an unseasonable thaw shortly before D-day.

In no time at all a warm rain with heavy fog turned fine armor country into a muddy morass while mild streams became good-sized rivers that spilled their banks to flood the flat country-side. In war this situation would have caused any respectable armor commander to head for the nearest forest and dig in, but unfortunately a large maneuver is like a large wedding: it is cheaper to go through with it than to call it off.

Wintershield II's build-up was simple and realistic. In late January Aggressor forces (U. S. VII Corps, U. S. 4th Armored Division, German 11th Panzergrenadier Brigade) began moving into their border zone south of the Danube-Altmuhl river system, a development at once reported by units of the 14th Armored Cavalry Regiment charged with border surveillance. Behind this regiment elements of Seventh Army (U. S. V Corps, U. S. 8th Infantry Division, French 11th Mechanized Brigade, German 54th Panzer Brigade) had just completed winter maneuvers and were now ordered to remain in their field assembly areas as NATO Task Force. On 27 January, with increasing Aggressor activity, NATO Supreme Headquarters declared a state of simple alert.

The play of the problem began on 0001, 2 February, when Aggressor began bridging the two

rivers while assault infantry elements, using boats and rafts, stole across at several points. Ten minutes after Aggressor's first crossings, the 14th Cavalry flashed the word and NATO Task Force began moving to initial defensive positions. At 0140 SHAPE ordered the execution of war plans. By 0700 Aggressor infantry units had crossed the rivers at six points and Aggressor had fired the first atomic burst which meant that henceforth tactical nuclear weapons were in play.

Subsequently, the problem embraced two phases. During Phase I Aggressor achieved considerable ground gains by controlled advances until 1500, 4 February, when an administrative break was called.

With resumption of the problem at 0001, 6 February, NATO Task Force began a counter-offensive, again of controlled advances, that ended at 1300, 8 February, with a final counter-attack by Aggressor.

Wintershield's primary purpose

The primary purpose of Wintershield II was "to train the individual soldier and small unit leaders in simulated combat conditions, exercising the combat readiness of our forces in Germany," a goal successfully fulfilled during six days of varying tactical situations, and a goal the more important in view of the 114,000-man turnover in Seventh Army during the past year. Equally fulfilled were secondary purposes such as the further integration of national forces into predominantly U. S. field operations, the testing of command and staff functions at all headquarters, and the intro-

duction and trial of technological advances in a number of fields. To me the most interesting aspect of Wintershield II was its emphasis on limited nuclear warfare and thus on some of the problems it raised and attempted to solve.

That several of these problems already have been considered, and even solved, is evident since for some years we have been concentrating on dispersion-concentration tactics or small-unit, highly mobile warfare that is essential to the tactical nuclear battlefield. Mechanical means necessary to this concept long since have been integrated into Pentomic divisions, while simultaneously missile play has become commonplace even as more complex systems are being added daily to the division arsenal. This maneuver made evident that we have a long way to go before the concept is mastered—but that we have come a long way was also demonstrated, as perhaps some random personal observations will indicate.

Particularly gratifying to NATO evolution was the smooth integration of foreign units into the U. S. Army's organization, general satisfaction being expressed by the commanders involved. My own observation was limited to the German 54th Panzer Battalion commanded by veteran Major Gert-Axel Weidemann. For most of the maneuver he commanded a task force composed of his armor and a U. S. rifle company within the

1st Airborne Battle Group, 505th Infantry, 8th Infantry Division. Both Colonel Theodore Mataxis, USA, CO of the battle group, and Major Weidemann spoke enthusiastically of the result which stemmed in part, of course, from the superior quality of both commands.

Although working with one-year draftees and junior officers with no combat experience, by D plus 5 Weidemann had yet to lose one of his 54 M48 tanks, and this at a time when the maneuver area was liberally sprinkled with mired armor. Weidemann's CP was the only camouflaged installation I observed, and his unit tents were the only warm ones I visited. Nearly all his officers spoke excellent English, so much so that on one occasion when observers were present who did not understand German, he briefed his officers in English. English was used also for all communications within the battle group.

Highly mobile warfare always places a premium on technical handling of equipment. Within my observation this seemed excellent throughout Wintershield II with the notable exception of march discipline. It may be argued that the weather unfairly confined armor and motor transport to the roads whereas under favorable conditions they would have been able to disperse easily. This is undoubtedly true, but it is also true that on numerous occasions when dispersal was

The "Blue Danube" shows black as French engineers of the 23d Battalion build ponton bridge at night. Most of Wintershield was held during extremely bad weather



possible it was not accomplished, a deficiency made the more glaring by the excellent march discipline of other units. One general officer, referring to several errant convoys seen on a particular day, growled, "Patton would have relieved every last one of those commanders!"

Communications

Another major deficiency was the familiar one of communications which just do not seem able to keep up with the extreme demands imposed by tactical nuclear warfare, particularly the requirements resulting from main, advanced and tactical command posts plus wide dispersion of units. Complaints of communication lags and breakdowns were common. Several commanders mentioned the need for increased unit transport to help overcome this deficiency; others from battle group and higher were concerned with the increased reliance it forced them to place on helicopters. Some officers pointed out the need for better radio discipline and felt that more complete orientation of small-unit leaders, coupled with allowing them more independent action, would have cut down traffic. There is optimism over the new transistor systems, but optimism has always been held for better communications without its being rewarded, at least to date.

The most noteworthy communications success was scored by the Seventh U. S. Army Aviation Company (Provisional), whose three flight operations centers (FOC) ran the entire air traffic control over the maneuver area. Not only did these FOCs succeed in the primary mission of preventing collisions in a crowded air area, but one of them operated as an entirely mobile prototype. Set up in seven- or eight-man vehicles, this FOC can move out in 20 minutes and after reaching a new site, can go into action within one and a half hours. It is said that five such FOCs are adequate to control all Army aviation in the field.

Helicopters and tac air

Helicopters as usual were given a tremendous workout and met with noteworthy successes as transports in two infantry assaults, in command support, and particularly in target acquisition, a mission integral to the sky cavalry concept. Of interest was the new French chopper, the Alouette, which can fly at 140 knots and whose design offers increased maneuverability and superb vision. However, instruments are at a minimum, and there is no de-icing equipment for the bubble. While the weather hindered chopper operations, it all but ruled out Air Force close support missions. Of 80 such requested by and approved in support of NATO Task Force, about 25 per cent were cancelled because of bad weather at departure airfields, about 40 per cent because

of bad weather over the target. Admittedly the safety restrictions are prohibitive. For Wintershield II they were lowered from 3,500 feet with 3.5-mile visibility to 2,500 feet with 5-mile visibility. This does not change the attitude of numerous Army officers who feel that they are not getting maximum close air support.

Men win battles

As much as Wintershield II stressed the technical aspect of the atomic battlefield, it still brought frequent and sharp reminders that men win battles, and perhaps it is paradoxical that with each technological advance this truism becomes the more profound.

One example occurred in the 8th Infantry Division. Despite the use of drones, aerial photography, intercept devices, and the like, its major success in intelligence collection was achieved by long range patrols left behind during the withdrawal in Phase I. So brilliant was the work of these soldiers that umpires ruled their continued existence as an unfair advantage to NATO Task Force, and forced their withdrawal during the break. When subsequent attempts to replant them proved unsuccessful, front-line infantry units became the major collection source.

One purely tactical example is of especial interest because it involved a night attack by infantry against armor. The genesis and play of this action have been investigated in considerable detail, because of both its increasing importance to the nuclear battlefield and the obvious importance of the small-unit soldier to its successful conclusion.

The insertion of play of Aggressor armor against a NATO force that was predominantly infantry was no accident since the Soviets are believed to maintain some 26 armor divisions in East Germany. To the commander of V Corps or NATO Task Force (Lieutenant General Frederic J. Brown), however, the news that the tactical guts of his force was the 8th Infantry Division came as something of a surprise. An exponent of armor who successfully commanded the 3rd Armored Division in last year's Wintershield I, General Brown regards armor as generally superior to infantry. He is also aware that at times the reverse can be true, and for Wintershield II he set about to learn if that could be proved. He thought in general terms of a night attack.

Major General Edgar C. Doleman, CG of the 8th Division, could not have agreed more, and indeed it is a very healthy sign that the idea was granted such ready acceptance by corps and division officers.

Pre-battle reconnaissance, not an artificiality in view of NATO's already holding the ground, disclosed an interesting terrain channel to the west which Aggressor armor would possibly need for a



French Army ferry-launch carries two trucks across the Danube River on D-day

main supply road. Time-and-space factors suggested that by late on D-day, forward elements of Aggressor armor would reach this area, a natural valley bordered on the east by a stream, on the west by secondary roads, and limited in depth by a main highway running east and west but criss-crossed by a railroad. Aggressor, it was reasoned, would want to reach assembly areas north of the highway-railroad system since the railroad was embanked and thus subject to easy blocking. Once in the area, Aggressor would bring up his tail and, behind a light screen, busy himself in preparing for next morning's attack. Admittedly this estimate involved the artificiality of a control line which could not be crossed by Aggressor until after midnight of D-day. On the other hand, in a real situation the same restriction could have been achieved by demolitions placed in advance.

Planners estimated that if Aggressor used this route, a minimum of two tank battalions and one armored infantry battalion would be assembled in the area. To discover and destroy such concentrations a spoiling attack was decided upon. The mission was given to the 1st Airborne Battle Group, 504th Infantry, which was placed in division reserve. Lt. Col. Sidney M. Marx, commanding the 504th, regretted the three-company limitation placed on the action but otherwise welcomed the plan as imaginative and very potential. He disclosed it to his company commanders some time before the problem began but ordered them to treat it as top secret.

One of the commanders involved was Lieutenant Wayne Smith, CO of Company A. Satisfied with his capability of mounting a night attack, he issued the general requirement about 24 hours prior to the start of the problem. At 1500 on D-day, Smith issued a warning order to his platoons to prepare for the specific attack which kicked off at about 2300 hours. The troops carried web belts with canteen, first-aid pack, extra ammunition, fire bombs and 3.5-inch rocket launchers. For camouflage they wore the white liners of parkas, or improvised them from sheets.

Once through the on-line company, Smith led his unit about four kilometers behind the enemy line. He used a slow march by platoons in column formation since he wanted to give the area a good screening in order not to bypass enemy units and thus cut himself off. At about 0130 he reached his patrol base, established local security and from each platoon sent out two or three recon teams of three to six men each to investigate possible enemy assembly areas. These teams were to report back not later than 0300.

Only one team made a positive report: it had observed a platoon of armored personnel carriers in a patch of woods guarded by about six men, the rest assumed to be sleeping. It was now 0300 and one recon team had not reported back. Smith reasoned that he had sent this team a considerable distance, that its sergeant was very capable and could lead it back on his own. Accordingly he moved out.

At the target he set up security, then attacked with two platoons. He destroyed all four carriers, and killed an estimated 20 enemy. Meanwhile, he heard considerable activity in Company B's sector but had no time to join this action. Instead he called in the locations of noise to battle group, then pulled out. Using his forward observer, he called fire down on his routes to seal them from the enemy. He brought out his three umpire-assessed wounded and at about 0630 reached friendly lines.

The recon team that Smith had left behind scored an operational bonus. After penetrating to the area's southern limit (the highway-railroad system) and finding nothing, the team leader returned to the patrol base, assumed correctly that that company had found a target, and led his team back towards friendly lines. Meanwhile, Aggressor in some strength had engaged the on-line company. Coming onto this action the small recon team set up a fire fight which evidently confused Aggressor, who withdrew.

Lieutenant Smith was well satisfied with the behavior of his troops and felt that their action amply justified the aggressive, very difficult training schedule insisted upon by Colonel Marx. During the attack, Smith's first sergeant, a veteran of night fighting in Italy during World War II, was in charge of company rear echelon. He observed that despite the fatigue on troops who upon returning from the action had been on their feet well over 24 hours, their morale was superb. It remained so during the rest of the maneuver.

In interesting contrast to Company A's experience was that of Company C which attacked on the right flank. Commanded by Lieutenant D. M. Craver, Company C swept its area and found only some armored tracks which, when followed, led to nothing. Even more frustrating was the noise of battle in Company B's area, a temptation resisted by Craver because he had to complete his own mission. Upon the company's return to friendly lines, an on-line roadblock reported its suspicion that Aggressor tanks had moved in behind them. Craver's men patrolled the suspected lateral road but again found nothing.

These negative results produced a curious effect on Craver's troops. Most of them were recruits but they had had a week's training in similar terrain not long before the maneuver and had been indoctrinated in so far as possible with the aggressive spirit demanded by the battle group commander. They not only were disappointed in finding no enemy; they were furious. "If we had met any of the Aggressor on our way out," Craver later remarked, "we probably would have torn them apart with our hands." Craver found consolation in the excellent spirit of his men—on one occasion when he asked for three volunteers

a hundred stepped forward—and from the realization that Company C, despite negative findings, contributed to the successful mission of the battle group. (He and his officers told their men that Aggressor had cleared the area when they heard Company C was coming in!)

All must know the mission

Not only did this night attack damage the enemy locally, but it caused enough confusion so that he unnecessarily exposed several of his positions, an error exploited by division in the form of six atomic strikes. Altogether, here is an action where a combination of imaginative planning and well-trained and well-led troops paid off—an action where three rifle companies imposed what would, in real combat, have proved a serious check on an entire armored division.

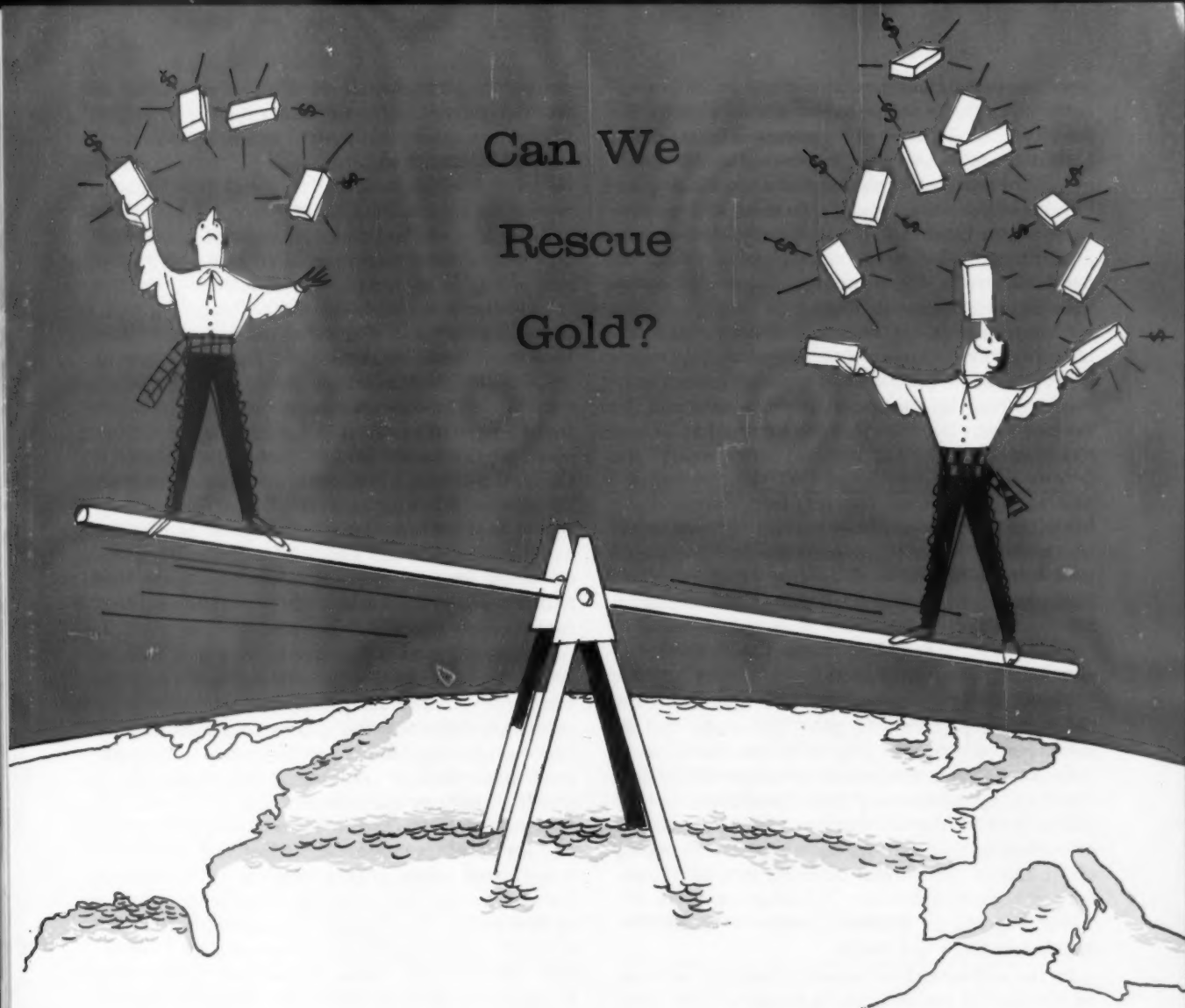
Unfortunately, on any battlefield, the opportunity is rare for advanced planning of actions which involve a minimum of communications and higher-unit control. Yet, more likely than not, the nuclear battlefield will offer these minimums but demand a maximum of independent small-unit action. More than ever does this stress the importance of the junior officer, the noncommissioned officer and the individual soldier. All must be so oriented, not only in the mission of the squad and platoon but up to that of the company and the battle group, if they are to carry on intelligently in case of command and staff breakdown.

Increased orientation at once raises the problem of how much can front-line units be told without endangering security. Some officers on Wintershield II pointed out that the first safeguard is the Soldier's Code or the moral responsibility of the individual to disclose nothing if captured; others suggested that more information could be offered than we do now, since its value would be so quickly dissipated by these fast-moving actions.

Extreme mobility raises still another problem which was remarked upon during the maneuver by a number of junior officers. Such are the demands placed on front-line units—demands normal to the limited nuclear concept—that the danger of extreme fatigue is formidable. To retain combat effectiveness, it was argued, maximum rest no longer is a luxury but a necessity. Yet too often came the order: stand by to stand by.

It is true that on occasion a higher commander cannot afford to conserve energy by the slightest sacrifice of readiness, yet more and more it is becoming necessary to do so. Indeed, in the light of what we already know, it is possible that our command and staff channels must be re-examined with a view towards eliminating what may be not only extraneous but downright dangerous in nuclear combat.

Can We Rescue Gold?



Balancing the payments is tricky, but it can be done

Lt. Col. CHARLES W. SCHUDT

BALANCE of payments, balance of payments! A few months ago we saw these words repeated over and over almost every time we picked up a newspaper or news magazine. But until the summer of 1960, who had seen, who had ever heard the term? Very few except for economists or students of international trade and finance. Until recently Americans haven't been faced with the problem of a chronic unfavorable balance in our international payments; a situation where for an extended period the total value of goods and services purchased from foreigners plus our grants, loans and investments abroad exceeds the total value of our exports plus foreign investments in this country. Even to the American economist or student, this was always "some other country's problem." Now it is our country's prob-

lem: the problem of our government, and, to a greater or lesser degree, the problem of every American.

To us in the Army, the problem suddenly became very close last November, when President Eisenhower sharply curtailed the number of dependents who could accompany military personnel to overseas stations. Although this restriction has been lifted by President Kennedy, we will remain concerned with this problem until it is solved; directly concerned, because of restrictions that will be placed on the amounts we are spending overseas and because as individuals we will want to do all we can to solve this problem. If it is not solved, perhaps the restriction on dependent travel will be reimposed—and we don't want that.

Let's explore the problem of the balance of pay-

ments and the closely related problem of a long-sustained drain on the nation's gold supply. By definition, the balance of payments is a statement showing for the period of a year the dollar totals of all the various categories of transactions between the American people, business and government on one hand; and the peoples, businesses and governments of foreign countries on the other hand. Naturally, these transactions do not neatly balance each other out. Each year they produce a net surplus or a net deficit, and since 1949, the balances have all been deficits—with one minor exception in 1957, because of unusually large shipments of oil to European countries during the Suez crisis in the fall of 1956. Figure 1 indicates this condition. During the last three years, the deficits have been so large that the government had to worry about the problem. Others have begun to worry also: first, foreign governments, which have begun to demand large amounts of gold for the first time since 1875; and, more recently, a growing segment of the American public, which was first made aware of the seriousness of the situation a few days after the Presidential elections in the fall of 1960.

There are only three ways to finance these deficits: by payment in gold, by credit instruments convertible into gold, or by combinations of these two. Credit documents are accepted by foreigners only when they have confidence in the stability of the currency of the debtor nation, and even then many countries have a policy of taking about half of their credit balances in gold. If confidence begins to decline, if foreigners think the dollar is going to decline in value, they will demand gold more and more.

In the settlement of balances between nations, no one has as yet invented a substitute for gold. The International Monetary Fund was created by the United States and 67 other countries to improve the convertibility of currencies between nations, and many other organizations have been established for furnishing international credit and other services, but none of these has come up with any means of eliminating gold as the only substance which a nation will accept after credit devices have outworn their welcome.

A nation can rely upon its stock of gold until it runs out, and when that day comes, it either stops importing from the rest of the world—and, in our case, stops giving, lending to, and defending the rest of the world—or it corrects the unhealthy conditions which brought about the problem in the first place. At the present rate at which foreign nations are demanding gold (\$2 billion during the latter half of 1960), our gold supply available for foreign payments will be exhausted within less than four years. Now, this obviously cannot be allowed to happen, because there are

certain imports which we cannot afford to do without—industrial diamonds, rubber and cobalt, to mention a few; and some that we could do without but wouldn't want to, such as: coffee, chocolate and English woollens. Nor will the cold war permit us to eliminate our foreign military commitments or our aid to underdeveloped countries. Our only choice therefore, is to find other ways and means of correcting the situation.

Let's back up and see what got us into this mess. Since World War II, we, as a nation, have been paying out more than we have been taking in, and this condition has lasted for too long a time. Probably the one factor most responsible for the present problem is foreign aid. Not, however, for the reason which first comes to mind—the \$71 billion spent for this purpose since 1945, 25 percent of which entered the balance of payments—but because of a variety of bad habits acquired by business and labor during the years of large foreign aid expenditures. These bad habits have diluted our ability to compete with foreign countries in world markets.

Before going any further, let's take a look at a balance of payments. Shown in Figure 2 is the estimated balance of payments for 1960. Payments are made to other countries principally for imports of merchandise and services, military expenditures, foreign aid, tourist expenditures and private long-term investments. Receipts from foreigners are derived from exports of merchandise and services, tourist expenditures and long-term investments made in this country by foreigners. We end up the year's transactions with a deficit of \$3.8 billion. This balance of payments for 1960 is fairly representative of statements of other recent years, with three significant exceptions. First, our balance of trade—the excess of exports over imports—was the highest in several years. This favorable development, however, was partially offset by the extremely high amount of long-term private investment. The third point of difference is shown by the method of financing the deficit. About half of the total deficit was financed by foreigners drawing down our gold supply. In past years, annual deficits were financed to a much greater degree by foreigners adding to their growing pile of short-term investments in the United States.

The 10 years of deficits cited earlier have had far-reaching effects upon our only means of financing them: namely, gold and short-term dollar assets. These dollar assets consist of short-term bonds and notes and time deposits in American banks. They arise from the proceeds of sales of foreign goods in this country, and from dollars spent in foreign countries by American tourists, military personnel and investors. In the complex machinery of international finance, which we

don't need to go into here, they become owned by foreign governments and central banks—which means that our government is obliged to settle them by payment in gold upon demand of their foreign owners. By the end of 1960, our gold supply had dwindled to \$17.8 billion while the accumulation by foreigners of short-term dollar assets convertible into gold had risen to the all-time peak of \$22 billion.

Since World War II, the United States became in effect the central banker for the central banks of the countries of the free world, and the dollar has become their reserve currency. All other currencies are tied to it, because their value is expressed in the charter of the International Monetary Fund in terms of the gold value of the dollar. Foreign nations would be badly hurt by the devaluation of the dollar, because of the loss in gold value of their dollar claims, because their currency is tied to the dollar, and because all of them would be forced into competitive devaluations to protect their foreign markets. Domestically, devaluation is no good because of the inflation that it would produce and thereby cut down the purchasing power of savings, fixed incomes and life insurance policies.

Reference was made earlier to some bad habits we got into during the foreign aid era. During the late forties and early fifties, we helped foreign countries build up their economies after the destruction of the war. American business did not have to worry about foreign competition; foreign

The task of military families serving overseas in curtailing individual expenditures so as to help reduce the flow of gold from the United States has little to do with battle readiness—the first duty of our overseas forces—but has a great deal to do with the ability of the United States to meet its many overseas commitments and thus to defend itself. ARMY is fully aware that many explanations of the balance of payments problem have been published, but it believes soldiers and their families will want to keep clearly in mind the reasons why they must watch their overseas spending in the years to come. Military families have a selfish interest in the success of the program to reduce spending; for if the program fails pressures to reinstitute the ban on dependent travel will most surely follow.

—THE EDITORS.

industries were not producing enough for themselves, and our industries were making the equipment purchased by the 75 percent of foreign aid funds which were tied to American goods. Improvements in productivity in American industry were paid to labor and stockholders instead of reducing prices. During the last few years, we have come to realize how super-successful foreign aid was. It enabled the industrial countries to rebuild their economies, to the point where they were satisfying their own demand with products formerly purchased from us, and where they were out-competing American producers in many fields, foreign and domestic. Examples of enormous in-

BILLIONS OF
DOLLARS

FIGURE 1. Annual Net Balances of Payments of the United States, 1950-1960

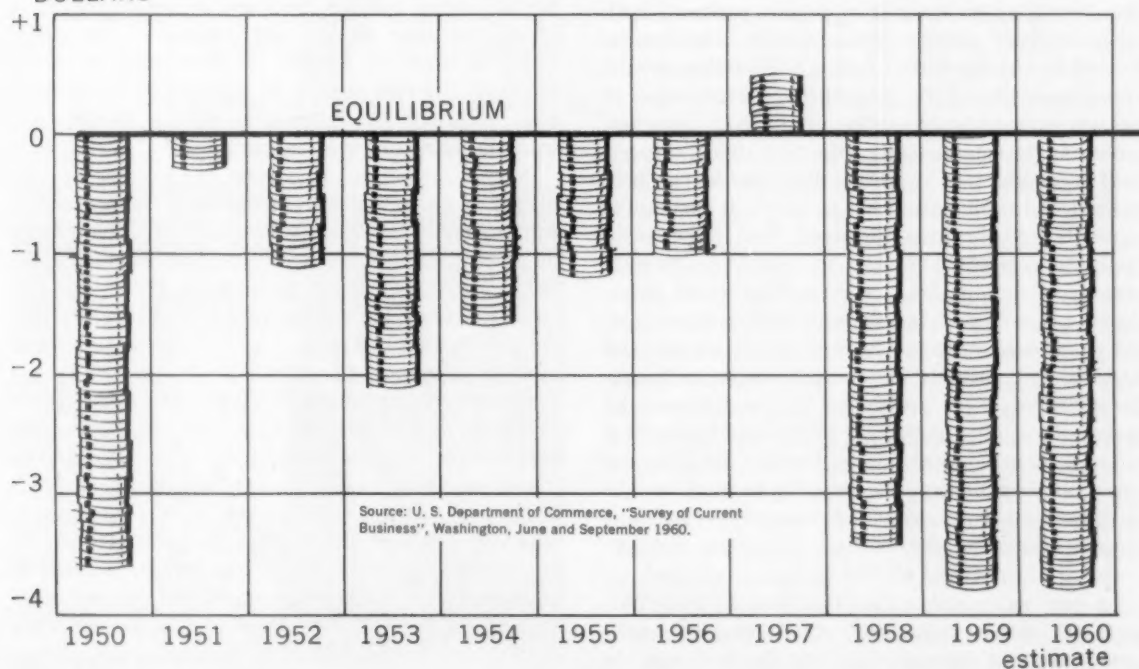


FIGURE 2
ESTIMATED BALANCE OF PAYMENTS: 1960
 (Billions of Dollars)

Payments:	
Imports of goods and services	18.5
Military expenditures	3.0
Foreign aid	2.2
Tourist expenditures abroad	2.0
Private long-term investments	4.0
Miscellaneous	1.5
	<hr/> 31.2
Receipts:	
Exports of goods and services	26.0
Tourist expenditures here	1.0
Long-term investments in US by foreigners	.4
	<hr/> 27.4
Deficit	<hr/> 3.8
Deficit financed by:	
Shipment of gold	1.8
Increase in foreign owned short-term dollar assets	2.0
	<hr/> 3.8

cursions of foreign industry into the American market are automobiles, clothing, and other luxury and technical goods. Recently, American business leaders began to wake up and see that it was imperative for them to meet this new large-scale foreign competition. To some extent, this is now being done by expanding our export sales. But this is only half of the story; another means has been found of meeting foreign competition, with not-so-healthy results. These results are demonstrated by the very high figure of \$4 billion which Americans placed in long-term investments in foreign countries in 1960. One after another, American businesses are selecting direct investment in production facilities overseas as the best method of tapping the foreign market, instead of exporting goods manufactured here. The principal reasons for this are to overcome foreign quotas on the imports of American-made goods (these are relics of the days of dollar shortage), and to take advantage of lower wages, taxes, and other costs available in foreign countries today. Examples of these are found in the decision by Sperry-Rand to move all portable typewriter manufacturing operations to Europe, and the decision by Ford to export over \$350 million for the purchase of the remaining outstanding shares of its subsidiary in the United Kingdom. Similar moves are happening all the time.

Interest rates are a closely related factor. Almost all of the industrial countries pay much higher rates of interest than we do. Not only do

foreigners convert their dollar securities into gold so that they can transfer their short-term investments to other countries and earn higher rates; Americans are also beginning to send their short-term money overseas. This is the "hot money" that we see mentioned in the newspapers. Partly at our urging, some Western European countries have recently reduced their central bank rates.

Amounts spent by American tourists abroad have been steadily increasing since World War II, and in 1960 amounted to \$2 billion. As in the case of foreign trade and aid, our government encouraged the spending of dollars abroad. Tourist facilities in foreign countries were rehabilitated and new ones constructed with the use of foreign aid funds. In 1948, the duty-free exemption on foreign merchandise brought back by tourists was raised from \$100 to \$500 per person every six months. Now what about foreign tourists coming to the United States? Surprisingly enough, their expenditures here amount to \$1 billion annually. The majority comes from Canada and Latin America; not many from Europe, because of restrictions in many countries on the amounts of money they can bring with them, and the fact that the U. S. requires visas (which have been difficult to get). Also our tourist industry has not been coordinated by the government and has made little effort to cater to foreign tourists.

Although the above brief examination of the problem and its causes will provide a basis for corrective actions, we must not rush into ill-considered actions which would complicate the situation even further. For example, higher tariffs or restrictions on foreign investments—which would cause foreign nations to retaliate; or a sharp increase in interest rates—which would have undesirable effects on the domestic economy; or the elimination of foreign aid and overseas military commitments—which would play into the hands of the communists.

Numerous actions to correct the balance of payments problem were taken by the Eisenhower administration, although there has been much criticism that effective action was too long delayed. Allies were persuaded to increase their expenditures to aid underdeveloped countries. Some countries of Western Europe were persuaded to make early repayment of previous American foreign aid loans. The Department of Commerce continued a program to persuade other countries to eliminate restrictions on the import of American goods. "Buy-American" policies were applied to foreign aid programs, and military off-shore procurement was reduced somewhat. With certain exceptions, the sale of foreign-made goods was prohibited in overseas post exchanges, commissaries and non-appropriated fund activities. Negotiations were

(Continued on page 78)

SCIENCE AND ARMY TRAINING

What HumRRO researchers are doing

LIKE Archimedes who needed a place to stand in order to move the world, the United States Army needs a basic foothold in order to be effective. Fortunately it has it. It's called training.

Let's see how important training is to our modern Army. Our scientists and industry give us the best weapons and equipment in the world. They enable our fighting men to move faster, shoot farther and quicker, and hit harder than ever before. We have indeed come a mighty long way. Take firepower, for example. In one of today's missile batteries, a mere lieutenant can push a button and in an instant turn loose more destruction than all the generals could inflict during the entire course of the Civil War. This power may not move the world, but you'll agree it can have quite an effect upon it.

However, fine as our weapons are, they can be no better than the ability of our soldiers to use them and keep them working. The lieutenant may push the button, but unless his crews have done their jobs properly, he might be greeted by a loud silence instead of the resounding roar of a missile on its way. If training breaks down anywhere

In a test of reaction under stress soldier puts out a fire. That his trouser leg is out of his boot and he is therefore out of uniform doesn't bother him at the moment



Lt. Col. FRANKLYN J. MICHAELSON

along the line—in either operator or maintenance functions—a unit is likely to fail in combat.

So this business of training is mighty important. As weapons have become more powerful, they have also become more complicated. This means we have had to teach skills that were unimagined only a few short years ago. There are many jobs to do, and most of them require a lot of training time and money. If the trend continues, we could wind up, absurdly enough, with one half of the Army training the other half—with no one left to do the fighting.

The training job has grown

Missile units vividly illustrate how the Army's training job has grown. However, this growth is by no means limited to such units. It affects all officers and men in all units of every branch. To do his job on the nuclear battlefield, the ground combat soldier must move fast and in small groups. He must take the initiative in applying his awesome firepower. In this setting, the need for keeping track of all other groups about him—to say nothing of the enemy—makes our training problems even more compelling. Quite a difference from the day when masses of soldiers moved across a battlefield under the constant direction of one decision-maker!

How are we solving these new training problems? In the past, we relied heavily on military experience and common sense, and that worked just fine. In our fast-moving times, though, we can't count on seasoned leadership alone to solve the training problems created by complex new weapons and tactics. There just isn't time, and there's no assurance we'll get the results we need. So the Army has turned to science to help its training. Everyone knows how science has helped improve weapons, communications and transportation, and found better ways to clothe and feed our soldiers. Few of us, though, appreciate the role of science in our training methods. Let's see what's going on.

The Army's scientists who develop new weapons are reinforced by others who apply themselves to greater efficiency in training men. Senior



HumRRO technician, with notebook, rates performance of two soldiers as they load and fire a bazooka. This part of proficiency testing conducted by Leadership Research Unit.

commanders are aware of the need to coordinate these efforts. The numerous jobs requiring greater skill and knowledge underscore the importance of effective training. Only through true efficiency in training can we make full use of our people, expand our training potential, save precious dollars and—most important—increase our combat power and save lives.

Our educational psychologists seek greater efficiency through better training methods and programs. Their research is aimed at finding ways to teach more men in the same time, or to teach the same thing in less time—depending upon what the Army needs. You don't just pull new and better training methods out of thin air, nor through some sudden inspiration. Rather, to come up with the desired result our social scien-

tists combine firmly established scientific principles with seasoned military experience.

How training research works

Here is how the Army's training research works. We train soldiers to repair a certain type of electronic equipment. Any Army school turns out graduates who can perform well, but say we find the course is too long. If the course were shorter, we could get greater use from the soldiers we train before they return to civilian life. Moreover, a shortened course would enable the school to graduate more each year. Both effects would increase the value received from our training dollar. So we turn the job over to our training researchers.

In seeking a solution, researchers first analyze

just what the soldier must do on the job for which he is to be trained. This job analysis is not limited to general terms. Rather, it goes into specific details. It spells out all the skills a soldier needs if he is to do what the Army wants him to do. Since we can't devise a training program without knowing what we must teach, the first research step is fundamental. No training program can be effective unless it is tailored to exact job requirements. Without this analysis we might end up teaching things that are not needed for the job or—worse yet—fail to include the things that are needed.

Once the job has been analyzed, the next step is to work out some method of measuring the ability of a trained soldier to do the particular electronics job. Usually, our scientists develop tests for this purpose. These tests are fitted to the job, and measure the precise skills and knowledge found necessary by job analysis. Proficiency tests stress performance on real equipment, rather than ability with paper and pencil. The tests must closely measure the things they are intended to measure.

After job analysis and test-building, the next step is to develop a new training program, shorter than the old one. The new program must include training in all aspects of the job, each being given the right weight. Subject matter is not all that is considered. Methods of presenting subjects in proper sequence also are worked out, and effective use of training aids and devices also is included. The result is a complete training package, ready for use by the Army school concerned.

These steps in the research process require close and continuous cooperation between the civilian scientist and the soldier. In the job analysis step, scientists must work hand in hand with military units that use soldiers trained for the specific electronics job. Only in this way can researchers determine what these soldiers are expected to do after they finish training. In developing proficiency tests, military judgment is essential to pinpoint important skills and to indicate how much of each skill is needed. Since any new program must be confined within the limits of available training facilities and equipment, Army school authorities are consulted at each step along the way. Cooperation is the keystone of research into military training; it facilitates application of sound educational principles tempered by military realities.

The final and crucial step

Now comes the final and crucial step that tells how well the new program works. In order to find out if the new program satisfactorily clears the training hurdle, researchers run an experiment that compares the standard electronics course with the new shortened one. The experiment is



Soldier of a control group does his best on a map reading course. Should a shorter course teach him as much as a standard one, new methods would save valuable training time

conducted under rigid controls, in the same way an engineer might test two fuels to determine which gives more mileage per gallon. To do this, with the first gasoline he would drive over a measured run. Then he would measure the same quantity of the second gasoline in the same car, and drive over the same course, being sure to do so at the same speed, with the same load, and under the same conditions of wind and temperature. In short, he would keep all things identical except what he was testing: the fuels to be compared. If a difference in mileage resulted, and if this difference persisted after repeated trials, he could be pretty sure which gasoline caused it.

Our training researchers experiment in the same way. They train two groups of soldiers for that electronics job we've been talking about. One group undergoes the standard course; the other takes the new, shortened one developed during the third research step. The soldier groups are selected by matching individuals as closely as possible on the basis of their ability to learn. Almost invariably, such things are matched as age, civilian education, general intelligence, scores on the Army Classification Battery, and length of service. Thus, the two groups are kept as much alike as possible.

When these matched groups finish their courses, their ability to do the required job is measured by the proficiency test developed during the second research step. If scores of the two groups differ, we can be confident that the disparity is due to the one thing that wasn't identical for

both groups: the courses of instruction. If graduates of the new course are superior to those of the standard one, then we have found a sound basis for substituting the new course for the old. If both groups showed equal proficiency, the shorter course would be favored, since its adoption would enhance training efficiency. Thus, the training problem will have been solved through scientific methods, and the Army will have obtained the benefits we mentioned earlier.

Who does this research?

Now that we've seen how military training research works, who does this kind of research? The Army looks primarily to the Human Resources Research Office (HumRRO) of The George Washington University in Washington, D. C. Working under contract, HumRRO is comprised entirely of civilians. Its Director is Dr. Meredith P. Crawford, distinguished scientist and educator, who started HumRRO in 1951. In the early days, HumRRO and its purposes were viewed with considerable doubt by many Army people. Under Dr. Crawford's leadership, it has grown into an enthusiastically accepted part of our training structure.

Although HumRRO's headquarters is in Washington, most of its research is done at Army posts. For example, its infantry training research is done at Fort Benning, Georgia, the Army's major infantry post and home of The Infantry School. Responsibility for training research at Fort Benning rests with the Infantry Human Research Unit, a military organization with both civilian and military components. The civilian component is made up of HumRRO scientists, under a director of research who reports directly

This photo was made in a darkened tent where soldier's reaction timing is tested under unusual stress



to Dr. Crawford. The military members are one officer and a dozen enlisted men. This officer is chosen for his breadth of infantry experience, the enlisted men on the basis of college backgrounds in the social sciences. The officer reports directly to CONARC, the agency primarily responsible for training.

Similar Human Research Units are stationed at the Armor Center, Fort Knox, Kentucky; the Air Defense Center, Fort Bliss, Texas; the Army Aviation Center, Fort Rucker, Alabama; and the Army Training Center, Presidio of Monterey, California. Each unit's research is related in general to the training conducted at its installation. This arrangement assures that researchers always have access to pertinent and reliable military information. It also affords a means for easy testing and implementation of research products. Research tasks primarily concerned with training in the Ordnance Corps, Signal Corps, and the other technical services are done by HumRRO's Training Methods Division in Washington. This division has no military component.

Some HumRRO accomplishments

Now that we've seen how the Army applies scientific methods to its training methods, and how the research organization works, let's look at some of HumRRO's accomplishments. There are many, but we have space for relating only a few.

The earliest HumRRO product accepted by the Army brought about a change in rifle marksmanship training. We still teach the same things, but in considerably different ways. Traditionally, marksmanship training used round bull's-eye targets at distances known to the shooter. This was superb training for the precision firing required in competitive matches, and it is still used for that purpose. However, it was felt that it didn't teach enough of the marksmanship skills required for actual combat. Accordingly, the Army gave HumRRO the job of developing a marksmanship training course that *did* simulate combat conditions. The result was Trainfire.

Trainfire prepares soldiers to fire under combat conditions. Instead of bull's-eye targets, they fire at man-shaped targets in a battlefield setting. These targets drop when a bullet strikes and pop back up when the control officer pushes a switch. In addition to adding realism, such targets let the soldier know immediately if he has hit or missed. Targets are placed at distances unknown to the shooter; thus, all soldiers get plenty of practice in estimating ranges. This also adds realism, since the infantryman in combat never knows how far away his targets are. Trainfire also includes a detection phase, which teaches how to spot targets among natural surroundings.

Trainfire encourages soldiers to take part in competitive matches. It stimulates a keen interest in all rifle firing, because inherently its method is interesting and challenging. Therefore, we use Trainfire to enhance the ground combat soldier's training—and in the process save training time.

HumRRO was asked to study training for recruits in the Armor branch. In conjunction with The Armor School, HumRRO came up with some methods that substantially improved the training of tank crews. It did this by applying to armor training some tried and true educational principles and several administrative expedients. These improvements, which kept training time at the same period, were accompanied by a decrease in gasoline and ammunition expenditures. The study, appropriately called Shockaction, produced some remarkable picture guides for the training of and future reference by gunners, drivers, and loaders. These guides, recently published in training circulars, illustrate each step of the tank crewman's job. They are useful not only at training centers, but also in Active Army, National Guard, and Reserve units. A by-product of Shockaction resulted in revision of tank gunnery qualification courses so as to improve gunnery training and save more ammunition.

As a result of HumRRO's research, better-trained missilemen are being turned out in less time by The Air Defense School. Research has concentrated on training electronics maintenance men. Traditionally, soldiers being trained for such jobs had to learn a good bit about the theory of electronics as a subject by itself. Maintenance courses, revised as a result of research, cut down the scope of pure theory given as a separate sub-course. No substantive content was discarded, however; it was merely redistributed throughout the course, and taught in the context of the hardware with which it is associated. This deliberate relating of the abstract to the concrete turned out to be so meaningful to students that courses have been shortened. Better, students are graduating with more proficiency than those who underwent previous courses. Students of some courses can do their jobs better at graduation than graduates of the longer courses could after a year on the job.

To perform under stress

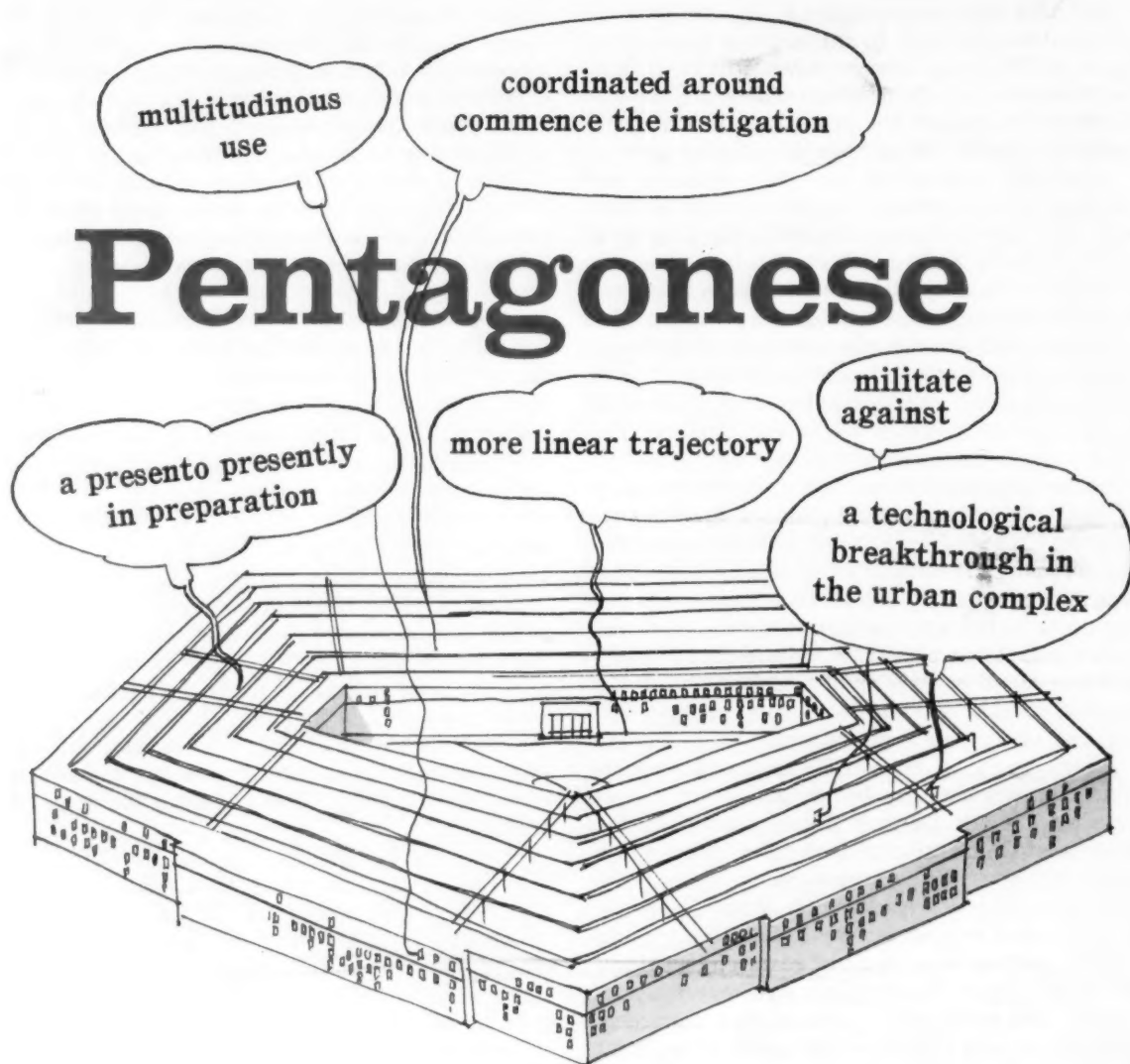
In all our training activities, we are always interested in teaching soldiers to perform effectively under stress. In order to do this, first we must have conditions that engender genuine pressure or anxiety. Until recently, stress could be experienced only through actual combat, since artificial situations always have lacked enough realism. However, during recent months, HumRRO has designed some situations that are

mighty convincing. Nothing like them could be found in scientific literature. It is possible to measure the effect of strain by training men for a military task, and then requiring them to perform under the stress produced by one of the experimental situations. For example, a soldier trained to install a telephone switchboard could be required to perform that task under pressure. Comparison of his performance with that under normal conditions should indicate how much his ability was impaired. This procedure could also be used to determine the best of several methods for training men to perform efficiently under tension. Thus, stress situations can help us train men to do a better job in the heat of combat.

Currently, HumRRO is striving for even further improvement in training men to operate and maintain electronic weapons systems. In addition, several research tasks are geared to developing improved training methods for other ground combat soldiers, Army aviators, and future battle leaders. Certain tasks predict training requirements for future weapons systems. Success in these tasks will go a long way toward having training programs ready when the hardware becomes available. In this way, research may point the way toward producing fully trained soldiers who are ready to man their weapons and equipment much earlier than would otherwise be possible.

During the last couple of years, HumRRO has produced results that can be applied to more than one training program. In these, the pay-off usually is not realized as rapidly as in the case of research pointed toward specific programs. However, the ultimate benefit can be much greater. Results of this broad-based research will be expressed in terms of what might be called a military training technology. This technology will overcome a wide range of training difficulties, and should eliminate the necessity of reaching all the way back into fundamental scientific knowledge every time a particular training problem arises. In the future, with a sound, scientifically based military technology at hand, the solution of problems will be simplified and made more effective. If we soldiers apply this technology, we can considerably broaden the impact of research on our training structure.

After seeing how Army research activities are conducted, what they have produced, and what can be expected of them, we can pretty well see that we're much better off than our friend Archimedes. Our foothold—training—is being made more secure all the time by integrating scientific methods into training. Applied science is paying its way in the Army now. We can look for even greater improvement in tomorrow's training product.



"Those who go wordfowling with a blunderbuss"—Fowler. FRED D. McHUGH

NOT long ago, on his midnight show, that bumbling genius, Jack Paar, meandered into the subject of words. "Funny," he said, "how so many advertising boys use that word integrity without knowing what it means!"

The Pentagon, Jack, can beat that—hands down! The Pentagon can beat it in bizarre word usage, in malapropisms, in wearing words threadbare.

This is partly due to the fact that the Pentagon is peopled with novices in the English language—from generals up and down. And the novice has an inordinate fear of paper and pencil in working partnership. He suffers a sort of stage fright when he must face the two in combination.

He is compelled to do so frequently in the Pentagon, for upwards of four-fifths of all letters and documents composed in that five-sided struc-

ture are laboriously hand-written. Because of this, the verbal output seldom has the easy fluency of dictated, or spoken, English. More often it betrays the groping by the author for words that'll prove his intellect is equivalent to his job or rank. In many instances, the reader visualizes an adult little boy with grubby fingers touching a pencil stump to his lips after every word or so. An old phrase for such uninspired, tense writing was: "It smells of the lamp."

I've saved some of the resulting verbal flora. One of my choicest specimens came from an Army special order of a few years ago which ecstatically heralded a new policy for simplifying all official reports. These would, the order stated, "be prepared in a style which is susceptible of easy understanding and is devoid of circumlocution and pomposity."

Since such a directive is "coordinated" through many Pentagon offices before issuance, there is less excuse for this "write-simply" monstrosity than for the unreviewed jargon of individuals. In otherwise straightforward writing in which everyday English would give just the proper touch of quiet dignity, these people lose few chances to use a "fancy" word.

My notebook is full of samples I've collected: *plethora* for *many*; *portaged* for *carried*; *instigated* for *began*; *mitigate against* for *prevent*. Invented phrases show a high order of imagination misdirected, as in *multitudinous use*, and *in view of the vast panoply required by our armies*. And this gem: *the phenomena behave as if in an infinite space*.

These samples, Mr. Paar, are not the products of low-salaried clerks, but of college graduates.

Apologists for the split infinitive may argue that this sort of writing is a sign of healthy growth of the language. They would say this groping for unique words and phrases springs from a desire to add color to the language, that is admirable and promising for the future.

If fancy words were meaningful and essentially irreplaceable we could applaud their use. I like expressive words, myself. But not for the same reason they interested the movie producer who was interviewing an applicant for a job on his staff. Asked if he were a college graduate, the young man apologized for failing to bring his diploma.

"Never mind," said the producer, "just say me a beeg woid."

We who don't go along with the beeg-woid school of language—any more than we'll tolerate the split infinitive—may be called conservatives, or even finicks. When we're called corny, we'll detest the overworked word more than the thought. The epithets do not offend. What does offend is the use of a cloak called Tolerance behind whose moth-eaten lining the lazy-minded hide while they mouth platitudes about "this virile language," and accuse some of us of trying "to hamper its healthy growth."

Right here one might suggest that it is not always virility that comes from the other side of the tracks; sometimes it is a vitamin deficiency.

In the Pentagon, fad-words come into full flower and fade so fast they soon possess neither color nor meaning and are useless. Too quickly the original fascination of their fresh and subtle coloring turns to loathing. For example, consider the word *fabulous*. A few years ago, it called up mental images of great wealth such as that of King Midas or of Monte Cristo's hoard, of feats such as the Seven Labors of Hercules, or of the doings of the late Mike Todd.

When the Pentagon discovered *fabulous*, it was

as readily applied to a conference, a new weapon, the taste of coffee at the snack bar, last night's inch of snow, or Mike Todd's visit to my office to arrange for a scene for his "Around the World in Eighty Days." You heard the word a dozen times a day, and it began to make you a bit ill. It does now, in legitimate use.

Some weird interpretations of dictionary definitions have saddled the military services with permanent etymological perversions.

Shrapnel is a special—and obsolete—type of artillery projectile which does not shatter into fragments but instead throws out a number of pellets. None of the type was issued during World War II. Civilian reporters, nevertheless, began using the name of British Lieutenant Henry Shrapnel as a synonym for *shell fragments*. (See any good dictionary; also *Combat Forces Journal*, March 1952.) The Pentagon word-amateurs—even generals—adopted the distorted usage. Now the word seems permanently vulgarized.

Years ago something happened to everyday words such as *enclosure* and *endorsement* so that the Pentagon now begins them with *in*. It also writes and speaks of *verbal* orders when *oral* is the word needed. All orders are verbal. I knew one colonel who used the latter word properly, and therefore I had him on my side for a time. But he's dead now.

During my earliest Washington days, I tried to fight *cognizance* in its bureaucratic usage but was laughed at, pityingly, for my pains. It continues to mean, in our Capital City, *jurisdiction* rather than *knowledge*. Is it because there's good reason—more jurisdiction than knowledge?

The laymen who is annoyed at what that self-styled Old Curmudgeon, Harold Ickes, called gobbledegook, is bewildered when he first discovers that the military service always spells *fuse* with a *z*: *fuze*. He may be amazed when he learns that that *z* once was the subject of some lengthy correspondence between the Public Printer and Army linguists. The *z* won.

A divisional staff major displayed his own brand of originality in answering a questionnaire as to whether an official military magazine I published should be discontinued. "Should publication of this magazine be terminated," he wrote, "loss of the material contained therein would be materially cognoscible to those of us whom enjoy its publication."

In the same tenor, historical reports prepared for posterity speak of "wage rates incapable of adjustment;" of a device "enabling the gun to be fired;" and suddenly you are startled by "notches in Blank Department's history." You wonder whether the author of "a more linear trajectory" wrote more straighter after reviewers read his line.

I hear many voices among those who have relatives or friends in the services hastening to the defense. "Not so bad," they say, "as the Madison Avenue boys! Look what *they* do with *up to*."

The point is well taken. Some recent observations in that direction have uncovered these samples: "Many of the dives went up to 50 feet down"; and "nothing wrong with plunking down up to \$10,000 for a car"; and this gem: "prices have been cut up to \$2.00 off." Is it that those MA Boys *all* flunked out before they learned the solid, versatile phrases *as much as*, *as deep as*, and the like?

And another thing: who told those same fellows that soap isn't a *detergent*? Or that detergent means anything but *cleanser*, be it soap, liquid chemicals, or Christ! Reference to a Funk & Wagnalls unabridged dictionary is suggested.

But we're becoming tangential without orbiting. Back to the Pentagon.

"Presently in preparation is a *presento* by an *ad hoc* committee to determine whether in-house research gives greater promise of a technological breakthrough than if conducted at Blank complex."

Now the man from Walla Walla or Baton Rouge or Wilmington would stop right there and turn the page. I don't blame him. I would, too, if I were not compelled to find the meaning of this stuff on stilts; my job often demands it.

The first word, *presently*, during my childhood meant *soon*, in a short time. It *presently* (!) takes the place of the three-letter word *now*, but often is used where no word is needed. One day I expect to hear a Pentagonian say, "It is presently raining." The other odd words in the sentence have become derelicts in tattered garments but are still given little jobs to do by a few people. Just today, in my presence a general spoke of a *presento*—a presentation or briefing. But *ad hoc* is practically a dodo. Ah, what a smart, esoteric word that was in my youth when tossed out nonchalantly by those in the know like a smug buffing of the nails against the lapel! Latin, of course, it meant, when applied to a committee, that the committee's efforts would be devoted to *this* (one) problem.

In-house is a new invention. The best definition for it that I can think of is *own*, for when the wordy boys speak of the Army's *in-house* research they mean the Army's *own* research. True to form, when these fellows reach for a substitute, it has to have more letters than the original.

It also has to sound clever—as in the case of *complex*, as used in the quotation. Although the word means no more than a group (of plants, buildings, and such) or a combination (of corporations, highways, or the like), it throws the audience into the mazes of a mental jigsaw puzzle during delivery of speeches or articles gen-

erally devoid of substance. Before use of the word tapered off, some people seemed actually to have developed a *complex* complex. Now they're suffering frustrations because they've found no substitute for it.

Breakthrough? The first splitting of the atom! The first nose-cone recovery from a long-range missile! The first space ship to the vicinity of the moon! Yes; originally the word resounded. A few days ago a Pentagon engineer spoke of "a technological breakthrough in carburetor design."

Many other fancy words seduce the intelligence of Pentagon people. Some of these, long expressive idioms adding color to the English language, so rapidly become clichés that they sound raucous or affected on the lips of generals. It isn't amusing. It is lamentable. So little attention is given to the art and science of communication of ideas that the national defense is handicapped and suffers accordingly.

If that sounds far-fetched or seems an extreme view, I invite any apt pupil of English to become the proverbial fly on the wall and watch the laborious straining for words that occupies much of the time of Pentagon people. I invite him to listen to the gab-gab of business conversation. He will, without doubt, begin to wonder how there is any understanding among people until after each phrase has been coordinated (Pentagonese for *reviewed*, *edited*, *censored*, or capriciously changed) through 16 different offices! Here is the handicap, the enormous waste of time.

What remedy do I suggest? I'm not too sure. I'm like the guy to whom the hobo in the cartoon hurls the challenge: "If you're so damned smart, why ain't you rich?"

A partial answer is that destructive criticism may be as valuable as the constructive variety. It can, and often does, goad the experts to action. That is what I should like to see: smarter men digging to the depths of this problem to make the armed forces realize that the English language is their native tongue.

As a starter, I offer a few suggestions.

All employees above some specific military rank and civilian grade shall be on probation until they learn to speak in sentences instead of staccato, disjointed phrases.

All employees shall learn to talk without the profanity which now curls the window sills of the Pentagon, and is a confession of poor command of words.

Executive and engineer personnel shall be required to become proficient in dictating all manner of documents.

Finally, all schools, colleges, universities, and the service academies which supply manpower to the Pentagon be advised that, in English, they are currently doing a poor job. A very poor job!

RAPID-FIRE TRAINFIRE

A lesson learned from an 1861 musket

Lt. Col. PAUL V. LILES



I THINK I can prove to you that in adopting Trainfire we took a backward step in the all-important field of combat marksmanship training. To prove it I must take you back to the Civil War and to my memory of an old Confederate veteran who many years ago taught me to load and fire a weapon which in his day proved its effectiveness in battle. This was the rifle musket. He told me how his squad leader had trained him to load powder and minie ball, prime, and fire in 12 seconds—all without taking his eyes off the target. Recalling this, I resolved to qualify on the Trainfire record range with a muzzle-loading rifle musket.

The rifle musket I procured was an M1861 caliber .58, made on government contract in 1863 by the Providence Tool Company. I made my own ammunition, and practiced firing it over a whole year, commencing with the known-distance range and ending with Trainfire. When all was ready, I challenged all major military rifles of the past and present to a match on the Trainfire record proficiency range.

The match was held at Fort Leonard Wood on 24 September 1960, a cloudy afternoon. Six participants turned out: one officer, four noncommissioned officers, and a recruit. The rifles used bore these designations and calibers: M1861 .58, M1903 .30, M1 .30 Match, two M1 .30, and M14 7.62mm.

What the M1861 rifle musket did

Firing was over the Trainfire standard record course, normal timing, all weapons firing simultaneously. The event was heralded as the Century of Progress Rifle Match, to show the advances made in a hundred years of military rifle development, and fired on the Trainfire record range so as to test these weapons under battlefield conditions.

Colonel Liles rams powder and minie ball into his M1861 rifle musket of Civil War days

Let me tell you what my musket did. From the foxhole at the first lane, at the command WATCH YOUR LANES, I saw a silhouette target appear at 250 meters. I fired on it with 500-yard sight leaf half-raised. Through the smoke I saw the target drop—a hit! While I rammed powder and minié ball, target No. 2 appeared at 300 meters but was lowered before I could place a copper cap on the nipple. Then target No. 3 popped up at 200 meters, and a low hold with the 300-yard sight leaf dropped it. No. 4 came up nicely at 150 meters but disappeared while I hastily reloaded. Next, target No. 5 raised only its head from the grass 50 meters away. Aiming low with the 100-yard sight leaf, I blasted it. No. 6 showed at 350 meters. That was too far, and anyway I had to reload. At 100 meters the head of No. 7 appeared. A fine

out with a hit on the first target at 250 meters, as before, and finishing up with several misses at easier ranges, when the bore had become fouled. On the second range, the musket scored 20 hits out of 28 rounds. Total number of rounds fired on both ranges was 53. Hits numbered 36—the minimum score for qualification as marksman.

I used a Lyman minié ball of soft lead, caliber .575213, weight 500 grains, pushed at 950 feet per second by 60 grains of DuPont FFg black powder. Bullets were greased with a mixture of Lyman lubricant and tallow, and were placed point down into the cardboard tubes used today in North-South skirmish shooting. This load duplicates that of the Civil War, except that a paper cartridge was used then. This rifle musket was in excellent condition: bright steel inside and out, all



A target pops up and Colonel Liles squeezes off a round from his Civil War musket. His reloading materials are on the nearby sandbag

bead at 12 o'clock with the 100-yard leaf knocked it down. While reloading, the 200-meter target came up again, but I couldn't make it. Total rounds fired on eight targets, four; total hits, four. I moved to the foxhole of the next lane.

After firing from the first four lanes, using the standing type foxhole, I engaged targets on three more lanes from a walk, firing from the squat. The score for the first range was 16 hits out of 25 rounds. Now a half-hour break was called, and I cleaned the bore of the musket thoroughly with water and allowed it to dry. This is important because after a few dozen shots the residue of black powder detracts from accuracy.

Resuming fire on the second range, I went through the same Trainfire course again, starting

parts of original make, with no additions such as peep sights, telescopes, or barrel with improved rifling such as you see on ranges these days. I did not use lard in the hollow bases of the minié bullets, to keep the bore fouling soft, as is commonly done now in skirmish shooting. Earlier, this practice was found to result in uneven burning of the powder and in many short rounds at the longer ranges.

What the modern rifles did

What about the rifles? The M1903, with 55 hits, qualified the firer as sharpshooter. The match M1 (calibrated) scored 91, qualifying as expert. The other M1 rifles made 86 and 72, both expert scores. The 72 was by a recruit in basic combat training,

with his issue M1. All caliber .30 ammunition was of match grade. The M14 scored expert with 73 hits. This is not to say that any of these are the best scores that can be made with these rifles. I point out, though, that all shooters were experienced with their weapons, and fired at the same time, under the same conditions, over the same course. Factors of publicity and competition were injected to insure that each shooter would try his best.

The Century of Progress Rifle Match was not intended to prove that the Civil War rifle musket was efficient and deadly, because Fredericksburg, Gettysburg and Cold Harbor make this unnecessary. Nor did we seek to show that military rifles have not progressed to a great extent after nearly a century. After all, the rifle musket with its 36 hits was about half as effective on the Trainfire record range as the new M14. Anyone only a little familiar with firearms can readily appreciate the enormous advantage in firepower of the M14 over the black-powder, muzzle-loading rifle musket of Civil War days. The deficiency, then, must be attributed to Trainfire, the course over which we fired.

I submit that Trainfire, although basically beneficial in marksmanship training, still does not afford a realistic test of the soldier's ability to use effectively the modern semi-automatic rifle. Moreover, as a training medium, it still does not demonstrate clearly and dramatically the full capability and firepower of the modern rifle.

Trainfire's great weaknesses are in the omissions of sustained fire exercises and the requirement for the rifleman to change magazines and reload under stress. In days gone by, generations of American soldiers learned to fire fast and accurately on known-distance range, where the red flag waved, whistles blew, target frames rose into sights, and rifles cracked fast and furiously. I recall too, the many fierce banzai charges of the Japanese that collapsed under a hail of caliber .30. You might argue that there is no longer need for such shooting ability, because banzai charges are things of the past. I point out that it was marksmanship under rapid fire that made such tactics passé.

In rapid fire (or sustained fire as it was later known) on the old known-distance ranges the soldier was required, under a pressing time limit, to fire a number of rounds very rapidly at a bull's-eye target, and to reload the magazine, or clip, during the firing. Rapid fire could always be depended upon to separate the experts from the marksmen. Looking at Trainfire, although each lane of eight shots can be presumed to be sustained fire, in practice it is nothing more than single shots at single targets. Enough time is allowed for detecting the targets, so that the time limits are not

tight enough to test the soldier's ability at rapid fire.

Rapid fire can be incorporated

In its general concept, though, Trainfire is definitely not a backward step. Its improvements are too valuable to permit a return to known-distance methods of teaching rifle marksmanship. Trainfire can be improved, however, with no great effort or expense, by incorporating into the system more instruction in rapid fire. Some of this instruction, in effect, is included in Trainfire's field firing phase. Soldiers are taught to engage multiple surprise targets from a halt, or while advancing. They are issued clips of ammunition and engage multiple pop-up targets which appear simultaneously at 300, 175, and 75 meters. The rifleman is also required to engage the more distant targets at 300 and 175 meters, and then fire on surprise targets at 75 meters. Each soldier is assigned two lanes, and the tempo of the exercise is designed to cause him to reload his magazine and to reduce stoppages caused by dummy rounds. All this instruction is excellent, of course, but why did we drop rapid fire from Trainfire's record proficiency range?

Requirements for the record proficiency range should never be lighter than those for practice firing. Qualification firing should always be the ultimate test of a rifleman's ability, something to strive for. And for a good reason. Keen competition on the record range insures that the firer will remember far more acutely any mistakes he made there. For years rifle marksmen will remember what caused them to drop a point when the chips were down. Indelibly impressed upon their memory are such small incidents as improper sight picture, a flinch, poor timing, fumbling the clip, or too strained a position. Mistakes made on the record range are never forgotten. Conversely, mistakes during practice firing are seldom remembered for long, being rationalized in one way or another in the shooter's mind.

To make it a fully effective training course, Trainfire's record proficiency firing should be changed by reviving the requirement for rapid fire. This need not entail any more firing than is required now. All we need do is substitute the rapid fire for the second phase of the record course. All we sacrifice is repetition of the record course by each firer—of questionable value, anyway, in view of the slow sequence in which the targets are now presented.

Proposed rapid-fire phase

The rapid-fire phase I propose should commence by issuing in bandoleers more than enough ammunition for the soldier to engage the targets. He should be instructed to fire as many rounds as he



Century of Progress rifle match contestants pose before the matches begin. From left to right: Col. Liles and his 1861 rifle-musket; MSgt. Robert Williams with 1903 Springfield; MSgt. Tolani Teleso with M1 match

rifle; MSgt. Charles Hargrove with issue M1; SFC Andrew T. Jones with the M14 rifle; and Rct. Charles A. Smith with issue M1. (Fort Wood Sentinel photo)

can, and to reload whenever necessary, from the foxhole position. He should be required to immediately engage the first two targets raised. These should pop up at 200 and 150 meters. When these are knocked down, those at 100 and 50 meters should be raised. Next, the firer should be required to simultaneously engage three targets raised, then four, and so on. Under realistic time limits, such a requirement for rapid fire will be a proper test of the rifleman's ability, and an extremely valuable training medium.

Through such a rapid-fire exercise the rifleman will be trained to use the modern semi-automatic rifle, such as the M14, to its full effectiveness. He will also appreciate fully the capabilities of this weapon in rapid and accurate fire at multiple targets. We are told that during combat soldiers usually do no more than they are taught to do in training. Actually, most of them do a lot less because of enormous distraction and mental pressures engendered by the noise and heat of battle, the effects of hostile fire, and the sight of casualties. If they are taught, as they are in Trainfire, to fire accurately at individual targets which rise slowly and in sequence, we can expect them to do the same in battle. What will happen when they are rushed by a dozen enemy at close range from ambush? Our soldiers should be trained to expect such situations, for they are common

in patrol actions—a large portion of infantry combat.

What will happen to our soldiers in front-line foxholes when the enemy stages a close-in assault? New weapons such as the Claymore mine are being developed to assist them, but why forget the rifle? In the past, cool-headed men have withstood many an assault by the simple combination of good marksmanship and guts. Our soldiers can do it again, and their chances are enhanced because the rifle has become much more effective in rapid fire. However, merely increasing the effectiveness of the rifle is not complete progress. We must also improve our ability to use it, through careful training on our firing ranges, in a marksmanship course worthy of a fine weapon.

Under the current system Trainfire does not teach the soldier to use his rifle to its utmost capability. Until such time as rapid fire is added to the Trainfire record course, my M1861 rifle musket, caliber .58, can prove that it too can qualify as marksman on the Army's latest record firing course.

Our soldiers must be so thoroughly trained as marksmen that future enemies may echo the words of that German officer who said of the 38th Infantry: "God save us from these Americans! They shoot like devils. . . . They are the best marksmen in the world."

La Guerra de Guerrillas

Concluding our condensation of Che Guevara's book on the lessons learned by Castro's rebel forces

Chapter III. Organization of the Guerrilla Front

Supply

A guerrilla force is not self-sustaining. Chow, clothing, munitions—all of the requirements of war—must be obtained by capture or theft and from farmers in areas where the guerrillas are operating.

Proper supply is fundamental for the guerrilla. The group of men, in touch with the soil, have to live off the products of that soil. At the same time they must allow the people who live in the area to continue to live.

In the beginning, one will live only on what the farmers may have. It will be possible to go to some store to buy something, but never to have supply lines, because there is no area in which to set them up.

Slowly, the area will be cleared, and then one can count on a greater ease in being able to act. The fundamental rule is to always pay for any goods taken from a friend. These goods may be the products of the soil or of commercial establishments. Many times these things are donated; but there are other times when the economic conditions of the same rural area make gifts impossible. There are times when the very needs of war make it impossible to pay simply because of

lack of money. In such instances the businessman should always be given a requisition or an IOU—something that certifies the debt.

If conditions continue to improve, taxes can be imposed. These should be as light as possible, especially for the small producer. Above all, care must be taken to maintain good relations between the farmers and the guerrilla army which comes from that class of society.

Meat is of prime necessity. If a secure area cannot be had, farms should be set up by farmers



Fidel Castro firing sniper rifle equipped with telescopic sight during a lull in the revolution

not connected with the rebel army. These farms should be dedicated to the production of chickens, eggs, and livestock that can be killed and their meat preserved.

In this way, hides are also obtained. Then a tanning industry—more or less elementary—can be developed to provide the necessary material for shoes, a fundamental need for fighting.

Salt is vital. When near the sea, it is necessary to set up small salt-drying basins which will assure the required production to provide a surplus after supplying the troops.

There will come a time when problems of supplying food to the troops in the area will be solved. Yet many other products will be needed: hides for shoes, if a leather industry cannot be created that will supply the zone; material for clothing and other necessary things for the same troops; paper, newsprint, or a mimeograph machine, ink, and all the other accessories.

The need for articles from the outside world will increase as the guerrillas continue to organize and as their organization becomes more complex. In order to protect the organization adequately, it is vital that the organization for the line of supply functions perfectly.

In all supply lines that pass through the countryside, it is necessary to have a series of houses, terminals, or way stations where supplies can be hidden during the day, ready to continue the following night. These houses should be known only to those directly in charge of supplies. The inhabitants of the house should be told as little as possible, even though they are people in whom the organization has great confidence.

Civilian Organization

Senor Inside and Senor Outside are both important to the guerrilla force which must depend upon, but never trust, civilians within its zone of operations—and enlist support and supply from outside sources.

The civilian organization of the insurrectionary movement is very important on both the internal and the external fronts. First, we will describe the work of the internal front.

We can say that the internal front is dominated, at least relatively, by the liberation forces. Also, it is supposed to be a region adequate for guerrilla warfare. When these conditions do not exist (that is, when guerrilla battles are developing in areas that are not suitable), the guerrilla organization extends but does not increase in depth. It makes channels into new areas, but it

cannot have an internal organization because the whole region is permeated by the enemy. On the internal front, we can have a series of organizations which carry on their specific mission of better functioning of the administration.

It must always be kept in mind that the zone must never, for any reason, be impoverished by the direct action of the rebel army. Indirectly, however, such direct action may be the cause of impoverishment because it precipitates an enemy blockade. The enemy's propaganda will attempt to blame the guerrillas for the condition. For precisely this reason, direct causes of conflict should not be created. For example, there should be no regulations to prevent farmers in the liberated territory from selling their products outside this area, except under certain extreme or transitory circumstances which should be carefully explained to them.

Farmers should also have connections which will permit the organization of the guerrilla army, at any moment, to direct the disposal of harvests and sell them in enemy territory through a series of more or less benevolent middlemen benefactors (more or less) of the farmer class. In all such cases, along with the devotion to the cause which makes the merchant defy the dangers involved, cupidity naturally makes him take these risks to gain profits.

When the guerrilla group has achieved a certain measure of development, it should establish a series of routes varying from the tiny footpath, only wide enough for a mule, to the good truck road. As a general rule, these roads help overcome the supply problem in areas where there is no other solution. They should not be used except under circumstances where it is almost certain that the position can be maintained against an enemy attack. The roads should be established between points that make communications convenient but not vital. No danger should be involved in their construction.

Other means of communication can also be established. A very important one is the telephone, which can be spread across the mountains by using the trees as wire posts. The wires cannot be observed from above by the enemy. In the use of the telephone, we presuppose an area that the enemy cannot penetrate.

Storehouses are very important. In establishing a point where a beginning of permanent guerrilla organization may be undertaken, very well-kept storehouses should be set up to assure minimum care of merchandise and, above all, to control its equitable distribution.

On the external front, the functions are different as regards both quality and quantity. For example, propaganda should be of a national and educational type. It should explain the victories

won by the guerrillas, call the attention of workers and farmers to successful battles and give news of victories achieved on the local front. Tax collecting must be totally clandestine, the utmost care being taken to protect the entire chain from the smallest collector to the treasurer of the organization.

This organization should be spread out in complementary zones to form a whole. The zones can be provinces, counties, states, cities, or villages, depending on the size of the movement. In all of these, there must be a finance committee which will take care of the organization of tax collections. Money can be collected by means of bonds or direct donations or even, if the war is far



enough advanced, through taxes. The industrialist will have to pay taxes because of the great strength of the insurrectionary army.

Supply should be conditioned to the needs of the guerrillas. It must be so organized that merchandise moves in a chain. The more common articles are procured in nearby places. Scarce ones, or those impossible to get anywhere else, can be sought from the major centers. Thus, one tries to keep the chain a limited one: the mission must be known to as few people as possible in order to make the chain last longer.

This is the framework of a civilian organiza-

tion inside and outside of guerrilla territory during a people's struggle. I repeat that I speak from my experience in Cuba. We are providing a framework, not a bible.

Role of Women

Women have abilities as communicators and culinary artists but they are not necessarily deadlier than the male.

The role that women can play, in the whole development of the revolutionary process, is extraordinarily important. It is well to emphasize this, because in all countries with a colonial mentality, a woman is underestimated to the extent that there is real discrimination against her.

Naturally, there are not many women combatants. When the internal front has been consolidated and the least indispensable combatants are being discharged, women can be set to work at a considerable number of specific occupations. One of the most important—perhaps the most important—would be communications between different combat forces; above all, those in enemy territory.

As a simple messenger, whether the message be oral or written, the woman is much freer than a man. She attracts less attention and, at the same time, inspires less of a feeling of fear in any enemy soldier, who often commits his brutal acts out of fear of an unknown force that may attack him, for that is the way the guerrillas operate.

Contacts between forces separated from each other, messages beyond the lines and even outside the country, including things of some size such as bullets, are carried by women in special underclothing. But all the time they also can carry on their usual peacetime pursuits. To be able to count on a well-prepared meal is very pleasing to a soldier subjected to the hard conditions of guerrilla life.

A very important job for women is the teaching of elementary reading and even revolutionary theory. Essentially, they teach not only the local farmers but may also teach the revolutionary soldiers. The school administration (part of the civilian organization) should rely fundamentally on women because they are able to inculcate greater enthusiasm in children and have the sympathy of the school population.

In health affairs, women play important roles as nurses or even doctors because they have a tenderness infinitely greater than that of a rude companion in arms, a tenderness which is so much appreciated when a man is defenseless, without

any comforts, perhaps suffering great pain, and exposed to the many dangers of this kind of war.

Health

Medical care is in direct ratio to the success of the guerrilla force, ranging from primitive in the early days to modern hospitalization as success crowns the revolution.

The organization of hospitals depends greatly on the stage of development of the guerrillas. We can distinguish three fundamental types of hospital organizations which correspond to stages of development of the guerrilla's fight.

In this historic development, we have first the nomad phase. In this, the doctor, if this is what he is, travels constantly with his companions. He is simply one more man and very probably has to carry on all the other functions of a guerrilla, including fighting. Always he will have with him the tiring and at times hopeless task of treating casualties who could be saved with proper treatment. However, the means do not always exist for such treatment. In this state of the development of the guerrillas, the doctor fully realizes his character as a true altruist who brings to the men the necessary consolation from his poorly equipped knapsack.

In the course of normal events in guerrilla warfare, one becomes "semi-nomad." At this time, there are camps that are frequented by guerrilla troops. There are friendly houses that can be completely trusted, where things can be taken care of, where the injured may be left, and where each time the tendency of the troops to spend time is more marked. At this time the doctor's job is less fatiguing. He can have emergency surgical equipment in his knapsack, and at a friendly house a more complete set for less hasty operations. During this semi-nomad phase, if one can get to places completely inaccessible to the enemy, there can be hospitals or nursing homes where the sick and wounded can recuperate.

In the third phase, there are areas that the enemy cannot control and where a true hospital organization can be established.

When a man falls in the front line, some stretcher bearers, if the guerrilla organization has them, will carry him to the first-aid post. Then the soldier passes through the first hospital and on to a second center where there are surgeons and specialists, depending on the organization. At this center, all necessary operations are performed to save his life or to improve his condition. This is the second echelon.

Afterwards, in the third echelon, hospitals are

set up with the greatest possible number of modern conveniences for the close examination of wounds or to diagnose any illness which may also affect the inhabitants of the area. These hospitals in the third group correspond to those in a settled community. They are not only centers of rehabilitation and of surgery that is not urgent, but in addition, are connected with the civilian population so that hygienists can carry on their teaching function. Dispensaries should also be set up which permit adequate personal attention. The hospitals of this third echelon will be able to have, depending on the supply capacity of the civilian organizations, facilities that will allow laboratory diagnosis and X-raying.

Necessary medicines should be obtained through contacts with health organizations in the enemy's rear area. Sometimes they can be had even from the International Red Cross. However, one should not count on this, especially in the early days of the struggle. It is necessary to organize an administration that will permit the rapid transportation of needed medicines in case of danger and to continue to supply everything necessary to all hospitals, military and civilian.

Sabotage

Indiscriminate sabotage has little purpose; carefully planned, it is perhaps the best tool in the hands of determined revolutionaries.

Sabotage is an invaluable weapon of people who fight a guerrilla war. Its organization corresponds to the civilian or underground part, because sabotage should obviously be carried on only outside the areas controlled by the rebel army. But this organization should be commanded by and receive orders only directly from the guerrilla general staff which decides the industries, communications, or other types of objectives to be attacked.

Sabotage has nothing to do with terrorism. Terrorism and personal assassination are absolutely different phases. We sincerely believe that terrorism is a negative weapon which in no way produces the desired effects. It can turn people against a revolutionary movement, and it brings with it a loss of lives among those taking part which is much greater than the return. On the other hand, personal assassination is permissible under certain carefully chosen circumstances. It should be performed only when the head of the instruments of repression must be eliminated.

There are two types of sabotage: one on a national scale for certain major objectives, and a local one for the combat lines. On a national scale it is aimed directly at the destruction of all com-

munications. Rapid communications are the enemy army's greatest weapon against the rebels in less rugged areas. We must, therefore, constantly attack this weapon by destroying railroad bridges, sewers, electric lights, telephones, and aqueducts. Lastly, everything necessary for a normal, modern life should be destroyed.

At certain times, the vital industries of each region will be destroyed with the proper equipment. When this is done, it is necessary to have an over-all concept of the problem and to be sure that one is not unnecessarily destroying the source of employment. Otherwise, hunger and a massive displacement of workers will result. Industries belong to supporters of the regime and should be destroyed unless the destruction brings about very serious social consequences. We must always try to convince the workers of the need for the destruction.

In the combat area also, sabotage should be carried out in the same way, but with much more daring, dedication, and frequency. In these cases, the tremendous help of the quick-moving patrols of the rebel army can be depended upon because they can go down into the zones and assist the members of the civil organization to do the job.

Sabotage includes appropriation of merchandise, cutting supply lines as much as possible, frightening farmers from selling their products, burning vehicles traveling on roads to create roadblocks. In each case of sabotage, it is desirable to have some contact with the enemy, whether at a distance or up close, and to follow the hit-and-run system. It is not necessary to make a big demonstration but only to point out to the adversary that, where there is sabotage, there also are guerrilla forces ready to fight. This causes him to keep his troop strength up and to move carefully or not at all.

In this way, all cities near the guerrilla zone of operations will slowly become paralyzed.

War Industry

Movement and applied firepower are the prime requirements for a successful guerrilla force—therefore shoe-making and gunsmithing are important war industries.

In the guerrilla army's view, war industry is the product of a fairly long development. Moreover, it should be well located geographically. As soon as zones are liberated and tight blockades set up around the enemy's supplies, the necessary different departments will be organized. We have already covered this.

So far as manufacturing is concerned, there are

two fundamentals: shoe-making and leather-working. Troops cannot walk without shoes in rough and stony terrain. It is very difficult to march under these conditions, and only natives of the area, and not even all of them, can do it. The rest must have shoes.

The rebel shoe industry is divided into two parts: one applies half soles and repairs damaged shoes, the other makes crude shoes. The rebel force should be able to count on a small shoe machine, very easily come by in these areas, to set up a cottage type industry operated by many persons. Along with shoe-making should go the machine shop where all sorts of canvas or leather equipment used by the troops can be made and repaired. These include cartridge belts and knapsacks, which, while not vital, contribute to comfort and give the troops a feeling of self-sufficiency and well-being.

Another basic industry for small internal organizations of guerrillas is the gunsmith's. It also has a variety of functions: repair of small arms, the manufacture of some types of weapons invented locally, and the construction and handling of mines with varied mechanisms. When conditions are good, it is wise to join to this an outfit for manufacturing powder.

Someone should be in charge of communications, too. He would be not only in charge of communications relating to propaganda and with the outside world, such as the radio, but also the telephones and all types of roads, and he depends on the necessary civil organization to carry on his job. It must be remembered that we are at war, that we can be attacked by the enemy and that, at times, many lives depend on rapid communications.

To keep the troops content, it is well to have cigar or cigarette factories. Leaf tobacco can be purchased in selected places and then brought to the free area where it can be prepared for consumption.

Another important industry is tanning. These are simply undertakings which can be carried on anywhere and are adapted to the situation of the guerrillas. Tanning requires certain small concrete buildings and a great deal of salt. However, it is a tremendous advantage to the shoe-making industry to have its raw material right at hand.

Salt should be made in the territory of the revolution, concentrating it in large amounts. To make salt, it is necessary to go to areas of high saline concentration and to evaporate it. The sea is the best source. It is not necessary to purify the salt by removing all attached impurities because it can be eaten in its simple form. However, at first it doesn't taste very good.

Meat should be preserved as jerked beef. This is simple to do and is a means of saving many

lives in a serious situation. For a long time it can be preserved with salt in large barrels. It can be prepared regardless of the external situation.

Information

Intelligence, obtained by any means, and Fifth Column activities to sow terror are potent guerrilla weapons.

"Know yourself and your enemy and you will be able to fight a hundred battles without defeat." This Chinese maxim is as worthwhile for guerrilla war as a biblical psalm. Nothing helps a fighting force more than correct information. It should be spontaneously given by the inhabitants of the area where the army will be and it should deal with what is going on in a specific place. Moreover, it should be reliable. Women should infiltrate and make permanent contact with the enemy soldiers and slowly find out what we need to know. A coordinated system must be devised to permit the crossing of enemy lines into the guerrilla camp without a hitch.

If this is done well and by capable agents, it will be possible to sleep sounder in the insurgent camp.

In those areas where the guerrilla organization is dominant or which it frequently visits, all people are its information agents. Nevertheless,

it is good to have people especially selected for this purpose because one cannot depend on the views of farmers, so accustomed to exaggerate and who know little of the precise language of war. One will be able to make the information machinery not only the very important auxiliary arm that it is, but also a counteroffensive agent. This can be done, for example, by means of the "sowers of fear" who may move about among enemy soldiers to sow fear and instability. Mobility, the primary tactic, can be developed to the maximum. By knowing exactly the places where the enemy troops are going to attack, it is very easy to run away or, in time, to attack them in the most unexpected places.

Training and Indoctrination

Guerrillas receive basic, too. Weapons firing is the heavy class but they learn other arts of war as well. And "troop information" appears—even in the field.

The very life of the guerrilla leader is fundamentally the training of the liberating soldier, and no one can be a leader who has not learned his difficult job in the daily use of his arms. The soldier will be able to live with some companions



who teach him something about the handling of arms, the basic notions of finding one's way, how to behave towards the civilian population, to fight, and other essentials. However, the precious time of the guerrilla leader should not be wasted in the details of instruction. That happens only when there is already a large liberated area, and large numbers of soldiers are needed to perform a combat function. Then basic training centers are established.

At such times these centers perform a very important function. They produce the new soldier who has not yet passed through that great sieve of formidable privations that convert him into a real fighting man. After he has passed through this difficult test, he reaches the stage of joining the circle of a beggar army that leaves no signs of its passing on any side. There must be physical exercises, basically of two types: agile gymnastics with instruction for the commando-type war which demands agility in attack and in retreat; and violent marching which stretches the recruit to the farthest point of endurance and hardens him for this life. He must, above all, get used to life in the open air. He must suffer all the changes of weather in close contact with Nature, as he will do when on guerrilla operations.

The training centers must have workers who take care of its supply functions. For that purpose, there must be stables, barns, orchards, dairy herd—everything to insure that it will not become a burden on the general budget of the guerrilla army. The students can be rotated in the work of supply, assigning it to the worst elements as punishment or simply on a voluntary basis.

All this depends on the characteristics peculiar to the zone where the training center is established. We think it is a good principle to put volunteers there and to fill up the details for necessary work with those who behave the worst or have the least aptitude for learning the art of war.

The center must have its small health organization, with a doctor or male nurse, as conditions allow, to provide recruits with the best possible attention.

Rifle practice is the fundamental element of instruction. The guerrilla must have much training in marksmanship and must be taught to expend the least possible quantity of ammunition.

The most important part of recruit training, and which must never be neglected, is indoctrination. It is important because men come in without a clear conception of why they came; they have vague concepts of personal liberty, freedom of the press, or other logical foundations. Therefore, indoctrination must be instilled for as long a time as possible and with the greatest dedication. During these courses, the elements of the history of the

country are taught and economic facts are explained clearly as well as the facts which motivated each historic event. The reaction of national heroes to certain injustices are explained; and, afterwards, the domestic situation or the situation in the area is analyzed. This constitutes a single primer which can be well studied by all members of the rebel army as a guide for what will come later.

In addition, there must be a training school for teachers so they can agree on the textbooks to be used and on the experiences which each one may be able to provide in the educational aspect of the movement.

Of all measures of military training, one of the most important is disciplinary punishment. Discipline must be (it is necessary to repeat this again and again) one of the bases for the action of a guerrilla force. Discipline must be, as we also said previously, a force which springs from an internal conviction and which is perfectly reasoned out. In this way, a person develops an internal discipline. When this discipline is broken, it is always necessary to punish the guilty, regardless of his position. His punishment must be drastic, and must be applied in a way that hurts.

This is important, for in a guerrilla soldier loss of liberty does not manifest itself in the same way that duress affects a garrison soldier. Ten days in the guardhouse can be a wonderful rest for a guerrilla soldier: he eats, he does not have to march, he does not work, there is none of the usual guard duty. He can sleep as much as he wants, he can take it easy, he can read, and so on. From this it is deduced that the deprivation of freedom under guerrilla conditions is not advisable.

There are times when the combat morale of the individual is very high, and pride in himself is considerable. The deprivation of his right to bear arms can provoke positive reactions and constitute for him a true punishment. In these cases, it is correct to apply such punishment.

Long periods of guard duty at night and forced marches can also be punishments; but the marches have the grave drawback that they are not practicable because they have no other objective than that of punishment and of tiring out the guerrilla soldier. To insure such punishment requires other guards, who also get tired. Moreover, punitive guard duty has the inconvenient aspect that others must watch the offenders.

In the forces directly under my command, I established for minor infractions the punishment of arrest with deprivation of candy and cigarettes, and total deprivation of food in the worst. Although the punishment was terrible and is advisable only under very special circumstances, the results can be wonderful.

ARMY— cerebrations

THE CRITICAL SIX MONTHS. *The inexperienced officer needs rules he can understand.*

Major THOMAS W. BOWEN

June approaches, when our universities and colleges will turn over to the Army their annual output of second lieutenants. At each source of commission, distinguished soldiers and civic leaders will mount the podium to wish the Army's new officers godspeed and offer much sound advice. In future years and in far-flung places this sage advice will be put to excellent use. Unfortunately, it usually does not concern the immediate six-month period of adjustment facing these young officers.

During this period the brand-new lieutenant cannot apply general principles clothed in generalities. He needs specific rules of conduct, the interpretation of which require little or no knowledge or experience. Each new officer sets forth bright-eyed and bushy-tailed to make his mark in the Army. Little does he know that his first six months of service will be a period of frustration coupled with feelings of futility. Despite the best efforts of his ROTC instructors to teach leadership and troop-leading, the average newly commissioned officer will experience a certain feeling of insecurity and inadequacy during those first six months. Even the practical leadership taught at our pre-commission schools is pitched at the service of the lieutenant *after* the first six months as an officer.

We need to direct more of our attention to these months, because for many newcomers they are critical. What advice can you offer the newly commissioned officer that will ease the adjustment during that period? How should a new officer handle himself while his men are sizing him up? Generalities like "know your job" and "know your men" cannot serve the purpose; neither of these glib phrases suffices. The rules must be simple and easy to follow. Try these:

- **Don't talk—listen.** A person can't learn anything while he's talking; he knows what he thinks and what he knows. Let others talk and expound until your

"experience" has seasoned your judgment for at least six months.

- **Don't imitate—observe.** While models frequently serve to show us the way, the slavish aping of mannerisms, actions and methods of another leads only to difficulties. Methods which are effective when used by one person may be ineffective and appear foolish when used by another. Be yourself! Try to place yourself in a subordinate's position and visualize yourself receiving your own instructions.

- **Follow the manuals.** All the information needed by a new junior is in the books. When you don't know, or fail to understand some detail, look it up. What the manual specifies is better and more accurate than what a buddy might happen to remember about a matter. On the other hand, guard against the ever-present tendency to flash the manual as the absolute source of authority.

- **Don't try to change everything overnight.** Rome wasn't built in a day, and your "new" system of command or maintenance or discipline isn't going to revamp the entire Army in a week or two. Conversely, never assume that nothing can be improved, or that your meager effort can't affect anything. It can. But start on the small things first. Let the generals handle the big ones—for a few years, at least.

- **Ask questions with humility.** Never be afraid to say, "I don't understand; show me what you mean." If there is one thing at which the American soldier is uncannily expert, it's uncovering bluffers. He doesn't expect a second lieutenant to know everything. You're no exception, and don't try to be. A corollary to this rule is to suggest, but do so in a questioning tone. "Sergeant, do you think this will work?"

There they are: five simple rules. They won't help? They won't work? Then I offer a sixth: If you haven't tried it, don't knock it!

CARS IS OK. *It can do the job*

LT. JOHN G. KELIHER

I believe the Combat Arms Regimental System has contributed greatly to the Army's traditions and heritage.

At the present time CARS is incomplete. We have had the system since 1957, and to all intents and purposes it should have been completely functional by now. However, for some reason progress has been slow. We still await the organization of the regimental headquarters and the assignment of a home station to each regiment.

Captain H. J. Meyer, in "Time to Change CARS," in

the December issue, claims the system has destroyed all our infantry regiments. Not so. While tactical considerations of the nuclear era indicated that as tactical units regiments were obsolete, CARS was initiated to insure the survival and continuation of the history, traditions and honors of our old and famous regiments, regardless of future changes in tactical organization. CARS reactivated several famous infantry regiments which had been broken up into battalion-sized units or had become inactive.

Captain Meyer speaks only of how CARS, to his

mind, affects the infantry, neglecting to mention that the system also embraces cavalry, armor and artillery. To these branches CARS has been a godsend because it returned to them famous regiments that at the start of World War II were broken up, or were redesignated or renamed, or both. For example, the 4th Cavalry since 1943 has been broken up and redesignated five times and reduced to a headquarters company of an armor group. There are many other instances where CARS saved regiments.

"Anyone who has lived and fought with an infantry regiment knows it marks were originality, common purpose, unity of effort and comradeship," Captain Meyer wrote. True, but these characteristics are not confined to the infantry regiment. They can be found in any well-trained and well-led squad, platoon, company, and battle group.

To say that active battle groups attempt to reacquire the heritage of the regiment is contradictory. Captain Meyer's next paragraph states that now "we join faceless infantry units each of which goes its separate way, avoiding regimental tradition and heritage." I have never heard of a unit under CARS deliberately avoiding its regimental traditions. On the contrary, units seem to use all available media to gain as much knowledge of them as possible. Maybe a few have strayed from some of their regimental traditions, but I venture to say it was due largely to ignorance rather than to intent. This will be eliminated when the regimental headquarters is established and can guide its units.

Circular 220-1 says each battle group (battalion, squadron) takes its lineage directly from one of the regiment's famous line companies (batteries, troops). For example, the 2d Battle Group of the 2d Infantry

can trace its lineage directly to the former Company B, 2d Infantry. This allows us to expand a regiment to 12 or more units or to contract it to one, without losing or disrupting the regiment's traditions or history.

As for the statement that old and respected regiments are groping around in a military vacuum, being in the same division as the 1st Battle Group of the 27th Infantry (Wolfhounds), I can say *they* have lost none of their famous tradition and esprit. I am sure all Wolfhounds, from battle group commander to the lowest private, take exception to such a statement.

After carefully reading the circular, how can anyone say that units of CARS regiments cannot share common traditions of past achievements? The circular states that all units of a CARS regiment will share the heritage and honors of the antecedent regiment. Besides, the regimental commander can issue all authorized trophies and mementos to his units.

Captain Meyer fears the day is coming when all battle groups will carry imitation colors. The battle group's color is a replica of the regimental color, distinguished from the regimental color only by the battle group's number in the upper right-hand corner.

I agree that the heart of the regiment is in its singleness. However, I don't believe we should simply activate new regiments in order to perpetuate singleness at the expense of tradition. Singleness can and should be transferred to the battle group (battalion, squadron).

No system can be perfect, and the Combat Arms Regimental System is no exception. When fully established, CARS can and will do the job it was designed for: to preserve the U. S. Army's historic combat regiments.

GOODBYE, OLD SOLDIER. *If you're over 40 and have high blood pressure don't read this.*

LI. WILLIAM J. LIELL

The trouble with today's Army (if we can sum it up as one problem) is not the young company-grade officers, or noncommissioned officer prestige. These are the old too-easy-to-arrive-at answers. Rather, the trouble is with the old passive thinkers who command a hell of a lot more than a young 30-year-old lieutenant or captain. Most of the Old Soldiers would have trouble commanding small units in today's peacetime Army. Are loading lists, savings programs and delinquency report rates really important in your efforts to train for your combat mission?

Speaking of commanding units, when in the name of Mars (another Old Soldier who never heard of bubble gum, the atomic bomb, or a mobile striking force) do young commanders get an opportunity to *command*? Initiative and imagination are strangled by the knots of directives and circulars that World War II thinkers employ. If you want to take your unit into the field all you need do is dig out a directive that some Old Thinker has written. (The situation map, except for the cloud of an atomic burst, hasn't changed since 1945.) The directive says what uniform to wear, what to teach, and how much time you can have to teach. It even tells if you can have a noncom-

missioned officer instruct the class! Further research will reveal whether or not you can use blank ammunition, tear gas, or smoke. You can find out from other sources if you can award compensatory time for a problem well run. Heaven help you if you issue a three-day pass that does not include a weekend. I could drag this on and on until it becomes nauseating.

The straw that really breaks the camel's back is to try to get a timely decision from some of the Old Soldiers! Everybody who is somebody has to check with another body before he can issue a decision. How many times do we hear, "The chief doesn't like mixed uniforms," or "The letter doesn't say anything about that"? Here is where we glide quickly to another topic or are hit with, "Try to work something out." Commanders give orders, not suggestions. Indecision is terribly morale-shaking; infinitely worse, it becomes contagious.

The nuclear battlefield is a phenomenon no one, not even the Old Soldier, has yet seen, and only a few imaginative men have tried to visualize it. Now is the time to make our young leaders think. On the nuclear battlefield we will experience many things no one has ever before encountered. Units moving too fast, situa-

tions changing hourly, units isolated for days. Communications would be a nightmare: radios jammed at least sporadically, wire ineffective if not useless. The young commanders will be alone, all alone.

Let them train for that day. Confidence, respect, loyalty must be instilled in both juniors and seniors. Our young officers and noncommissioned officers must learn to function without the questionable benefit of World War II or Korean experience. Who in 1942 or 1952 would dare to imagine four-up-one-back?

Old Soldiers are resisting desperately a change that was inevitable. Many of them still think a shell report is important. The nuclear battle will allow no time to put the information to fruitful use. Either the observer, the friendly artillery or the enemy guns will have moved. No, the shellrep might have served in World War II but today it is as antiquated as its inventor. Too slow. In their fight against change Old Soldiers either refuse to introduce atomics into the play of the problem, or completely ignore them when they are injected by umpires.

The Old Soldier is so safety-conscious that he is leery of even using blank ammunition for fear someone may be hurt during some good, hard, realistic training. Ask for permission to use tear gas at night during a problem and you are looked upon as a trouble-maker. If you must train a group of 20- to 25-year-olds how to rip open an enemy's belly without vomiting all over the fallen foe, someone has to get hurt occasionally. Driving jeeps, clerking, operating radios, cooking, all these are secondary tasks. A soldier is with us for two years to learn one thing: how to kill the enemy.

Old Soldier, you did a wonderful job in World War II. We are truly grateful. You fought and died a thousand deaths, so that some day kids like us would be reaching for your job, trying to push you out of the way. Do you remember—was it so long ago, or was it only yesterday—you had all those crazy scatter-brained ideas: infrared equipment, helicopters, jet airplanes, a single bomb that could erase an entire city from the face of the earth?

MORALE FROM CEREMONIES. *Battle deeds are worth remembering.*

Staff Sgt. WALTER H. DABNEY

It seems to me that through a few changes in current regulations, our system of parades and reviews could be made more impressive, more meaningful, and be converted into a medium for instilling personal and unit pride. I believe that reviews and ceremonial parades as prescribed by FM 22-5 might be modified so as to focus public attention upon the history and best traditions of the U. S. Army, inspire the young soldier, and constantly memorialize our gallant living and honored dead.

Without reducing the current functions of the review and the ceremonial parade, these improvements could be effected simply by modifying a few paragraphs of FM 22-5, and changing AR 600-25 so as to require personal honors for those decorated for valor.

For example, we could have each company com-

How to Ask for Troop Duty

Recently I ran across a simple, concise form of request which might well become standard as a Department of Defense form, preferably about the size of the current Form 95, Memo Routing Slip.

Many a man has the urge to initiate such a document but can't seem to summon the intestinal fortitude or the proper wording to state his needs. This proposed form gives him a tool with which to proceed. Here it is:

SUBJECT: Relief from current assignment.

To: [Your immediate superior]

1. Request that I be relieved from duty on the General Staff assigned to duty with troops.

2. I have been on staff duty since _____, and I am tired from the incessant strain of office work.

[Signature]

Without doubt this is the model of the direct approach. And well it should be, for the writer was Lieutenant Colonel George C. Marshall, at the time G3, 1st Infantry Division, AEF. His request is dated 18 June 1918—after some 40 months of staff duty.

His request—you guessed it—was disapproved.

MAJ. ROLFE L. HILLMAN, JR.

Today's young lieutenant can deliver one single artillery round that you as a young soldier never remotely imagined. Today's young officer has combat television, radar and helicopters. If, after bearing with me up to here, you still think the camouflage net, the intrenching tool and the steel helmet are important, you are an Old Soldier. Please move over . . .

mander render his report in this manner: "Sir, I report Company A, organized in 1812. Five hundred and ten dead in the service of our country; all others present or accounted for!"

The Headquarters Company commander would report for the battle group or the whole regiment: "Sir, 84th Regiment, organized in 1812, served with distinction in War of 1812, Mexican War, Indian Wars, Civil War, War with Spain, Philippine Insurrection, China Relief Expedition, Mexican Border, World War I, World War II, Korea."

After ATTENTION TO ORDERS, the adjutant reads a unit citation or a personal citation from the outfit's history.

In a review which includes the award of decorations, we might have this report by the commander of

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MORTON PENNSYLVANIA **BOEING**

troops: "Sir, I have the honor to present four soldiers of this battle group who have distinguished themselves in combat in the service of our country. This day they join the honored rolls of our regiment whose cherished memories include seven Medal of Honor, twenty-two Distinguished Service Cross, eighty Silver Star, one hundred and seventy-nine Bronze Star for Valor, and seven Distinguished Unit Citations earned on the field of battle."

After the last award has been presented and his party has returned to the reviewing stand, the reviewing officer announces: "In the name of the President of the United States, I have presented you these decorations as a visible honor and token of the high esteem in which you are held by our Government and people, and by your comrades in arms, both living and dead. Henceforth, at all ceremonies, the unit in which you are serving is entitled to honors."

He then directs the commander of troops: "Let the drums roll in their honor!"

The commander of troops brings the unit to Attention and then to Present Arms. The band sounds one flourish and the drums the number of ruffles appropriate to the decoration.

After the award of honors the troops are brought to Order Arms. The reviewing officer then directs the commander of troops: "Let the troops pass in review in their honor."

When the colors and decorated soldiers have taken their posts, the review proceeds as prescribed in the manual.

During reviews of units larger than a battle group, or those at which no decorations are presented, after the leading element has turned into the reviewing line it marks time at a point 60 steps to the left of the reviewing stand. While it is there the adjutant on the staff of the commander of troops reads a list of that unit's citations and the band renders flourishes and ruffles to acknowledge the decorations to those present in its ranks.

After the list of unit citations has been read, the troops continue the march in review.

We could amend AR 600-25 by rendering honors at ceremonies to units having soldiers in its ranks who in the past were decorated for valor in combat. These honors are transferred from unit to unit in which the decorated soldier serves.

For having in its ranks the Medal of Honor, a unit might be entitled to one flourish and four ruffles; for the Distinguished Service Cross, one flourish and three ruffles; for the Silver Star, one flourish and two ruffles; for the Bronze Star for Valor, one flourish and a ruffle.

To make these ceremonies more impressive, and so that they could be heard by all troops and spectators, adjutants and unit commanders could be equipped with transistor microphones connected to a public address system.

I believe this method of acknowledging personal and unit combat valor would go far toward enhancing esprit. By reminding soldiers of the valiant battle deeds of their predecessors, we can inspire them to emulation.

SCHEDULED SUPPLY. *A nice idea if used in wise moderation.*

Lt. Col. R. N. ROLLASON

I have been asked by readers of my article, "A New Look at Battlefield Logistics," in the March issue: "Why didn't you discuss 'scheduled' supply? It's included in most new logistic proposals." There were two reasons: the practical matter of space limitations, and the fact that I felt it was less controversial than the concepts I discussed: small general depots, support commands, composite units, and logistics management centers.

For those not entirely familiar with the concept, scheduled or automatic supply is intended to make the impetus of supply be truly from rear to front. There is little question that it would accomplish a good bit of that purpose, but is that what we really want? I know the easy answer is Yes, but once more, is it? There may well be more than one answer.

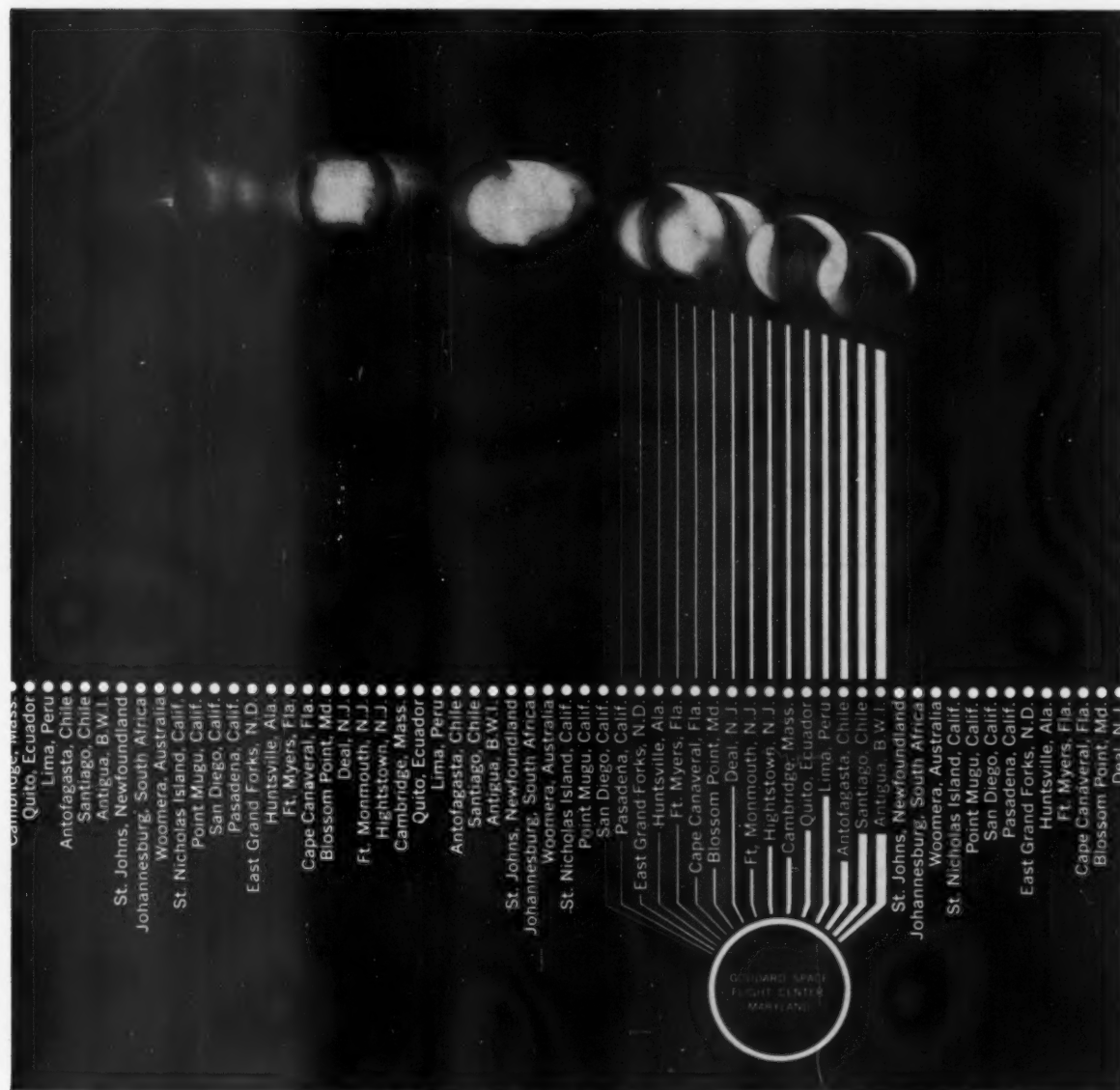
The scheduled supply concept says, in effect, that someone in a rear echelon determines what will be needed by each forward unit. Every day, without requisition, he automatically ships forward the supplies to meet those requirements—unless he is told by the user to modify the daily shipment.

For some things and in some circumstances such a system can work well, but there are three points to note in particular. In order for anyone remote from

the scene of consumption (and this includes division, corps and army staffs) to compute with any degree of accuracy the daily quantities of any article that will be required, that thing must be consumed at a fairly constant rate. Second, the only real difference between a message directing modification of a daily shipment and a requisition is one of nomenclature. Both originate with the user and both tell the supplier what the user wants.

Finally, and most important, the user must be willing to accept some degree of fluctuation in his supplies. He's bound to receive some things he doesn't need and be short of some the rear echelon never thought of.

In spite of these drawbacks, there are times and circumstances where the advantages outweigh the handicaps. Also, for some kinds of supplies, the system can work well *all* the time. During the initial phases of an amphibious or airborne assault we have always used the scheduled supply system. In any such situation the intent is to insure that the assault commander has everything he needs and thus can be free to concentrate on the tactical side of his job. But we always chop it off as soon as the commander establishes logistical control and begins to tell the supplier



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The world over, National Aeronautics and Space Administration Minitrack Stations remain on 24-hour call. Their job: to pick up any and all satellite tracking intelligence; transmit it **instantaneously** to NASA's braincenter: The Goddard Space Flight Center in Maryland.

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point as a relay between individual stations. Equally important: Maryland can send launching and tracking intelligence **simultaneously** to every NASA installation on the globe.

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his true needs. We have to change to a requisitioning system because we can't afford to keep up the automatic one. It's too wasteful when applied to all supplies. When the logistical analyst at rear echelon computes the requirements for a thing for which there is no uniform rate of consumption, in order to be safe he has to compute high. The invariable result has been that long after a campaign has ended we have had to keep on gathering up supplies that were delivered and never needed.

Food is probably the class of supply most readily adaptable to scheduling. If you know how many people there are in a force, you can ship almost within ounces of the right amount. It has another beautiful feature: interchangeability of articles. As an individual user you might prefer caviar, but if you get beans you won't starve. POL is another good example. With rare exceptions fuel that drives one type of vehicle will also drive another. Even clothing has a considerable degree of interchangeability. But try feeding 155

howitzer ammunition to a machine gun! If weapons got indigestion, this would be an acute case.

In spite of that last example, even ammunition is a good subject for scheduled supply throughout *most* of the supply system, but not *all the way* to the user. For any fairly large force (three or more divisions) the total daily requirement of the force can be fairly accurately computed. But no logistician can foresee which of those divisions is going to make the main attack or which one is going to be in reserve. And not even the force commander can really foretell which one is going to bear the brunt of an enemy attack. While the *average* division consumption might well hover around 100 tons a day, exclusive of supporting corps and army artillery, among those three divisions it can range from a minimum of almost no consumption for one, to 200 or 250 tons for the one in the thick of things. And within that heavily engaged division no two battle groups and supporting artillery will be faced with the same situation. One will have an

SIDELIGHT

Medical specialists for STRAC

Some time ago the Army discovered that not enough enlisted medics were being assigned to Fort Bragg. While the Army Medical Service Schools at Fort Sam Houston turn out large classes of medical specialists, graduates were generally being pipelined to installations through the Continental U. S. and overseas. Lieutenant Colonel John C. Keele, Jr., then Executive Officer of the 55th Medical Group, suggested the establishment of a medical training school at Bragg whose enlisted graduates could be assigned directly to units of XVIII Airborne Corps, the all-important STRAC. As the result of a local study, on 13 January 1958 XVIII Corps opened its Medical Training School.

Training facilities and assembling a faculty were the first hurdles met. To resolve the problem, the 55th Medical Group was given the additional mission of staffing and operating this School. Its commander became the School's Commandant.

The School did its best with makeshift training aids and an understrength staff. But the soldier does the best with what he has; results are what count. After a little more than a year and a half, XVIII Corps' school has graduated some 1,000 trained medical

specialists from units at Bragg, nearby Pope AF Base, and Fort Campbell. That's more than the number of medical specialists now assigned to Fort Bragg and Fort Campbell combined.

Skilled medical instructors use the most up-to-date teaching methods to project a five-week course of 216 hours. This curriculum includes introductory subjects, field medical records, anatomy and physiology, field surgery, field medicine, evacuation by light aircraft (this is taught by pilots from the 55th Group's 56th Medical Detachment), pharmacology, bandaging and splinting, diagnostic and nursing methods, neuropsychiatry, field sanitation and preventive medicine, physical training, review, examination and discussion, and extensive-intensive field subjects.

Initially the course was spread over four weeks and was designed to train soldiers in the field functions of a medical specialist. The main difference between the original period of four weeks and the current one of five is that in the new course the fifth week is spent in the field. Here the student practices what he learned in class.

The faculty includes eight enlisted instructors with outstanding backgrounds in field medical service, as well as members of the

Army Nurse Corps assigned to units of the 55th Medical Group. The administrative staff of 12 enlisted men includes a sergeant major, an operations sergeant, platoon sergeants, a supply sergeant, clerks and projectionists. Some of these double as instructors.

Although classes fluctuate in size, the School can graduate 110 each semester. Classes have run as small as 20 men, and as large as 110. Classes of 110 are divided into halves for cross-training. But not everyone graduates. Because training is rigorous, an average of 18 per cent has fallen out.

Like any good school, this one relies heavily on realistic training aids. These include an anatomical torso with removable parts, two skeletons, pathological specimens, and instrument display boards, to name a few. Exhibit boards display all medical equipment of the aidman and technician. Students see the latest professional medical films.

In the field, students practice their newly acquired medical knowledge. Before any test "casualty" is treated, the entire class is taught how to erect a field hospital by actually assisting in pitching the heavy tent and installing medical equipment. Through the use of moulages, "casualties" are scat-

abundance of mortar targets, another will be making little use of its mortars while practically wearing out its recoilless rifles. Still worse from the supplier's point of view, by tomorrow the situation can be completely reversed. Scheduled ammunition supply this far forward would be disastrous for the user. But scheduled ammunition supply certainly can be used to all army ammunition depots and sometimes even to all ammunition supply points.

It's when you get to heavy equipment and the repair parts for their maintenance that automatic supply is useless (except in the amphibious or airborne assault phase we mentioned). No one can predict which unit is going to lose how many tanks, nor when. And the best engineer in the world couldn't tell you when a particular part is going to fail. Of course, supply records can tell you how many of which parts *have been* used over a past period; and *if* the conditions under which the records were developed remain constant; and *if* the base of measure is large enough,

you can predict with moderate accuracy how many of these parts you'll need in the future.

The trouble is that conditions never remain constant. Equipment ages, operators and crews come and go, weather, terrain and enemy action change. And the amount of equipment a maintenance unit can support and yet remain close enough to the user to really support him, is too small to provide an accurate base for effective computation. Every maintenance unit is going to use more of some parts and less of others than it computed in advance—and no two maintenance units will have the same experience. One reason for this is that no two such units will have the same luck in finding salvageable parts from their available un-serviceable stocks. Consequently, a requisitioning system is the only answer for this type of supply.

An automatic or scheduled supply system is good—for some articles and in some circumstances. But like many concepts it must be applied with common sense. It isn't a cure-all.

Lt. Col. JOHN C. KEELE, JR. and SFC CHARLES W. BAXTRESSER

tered over the Fort Bragg reservation. As part of the combat test, students must find the "casualty" and administer proper treatment under the eye of a faculty member who makes spot corrections and awards grades. Students also learn the proper methods of litter and body-carry evacuation, together with evacuation by ambulance, helicopter, and truck.

The day after returning from the field—usually on a Saturday morning—an impressive graduation ceremony is held in one of the post's service clubs. Friends and relatives are invited to the exercises which are addressed by a prominent officer.

Graduates are awarded MOS 910.00; those with prior training or of commensurate rank are given an additional MOS of 911.10. For example, a sergeant with an MOS of 111.60 upon graduation rates the additional MOS of 911.10. Students returned to the School for retraining are awarded the new primary MOS called for by their pay grades.

On a percentage basis, most honor graduates have come from the 77th Special Forces Group. Of the School's graduates, more than 300 came from units of the 55th Medical Group.

For many students training does not end with graduation. If recommended by unit commanders, selected soldiers get six weeks of advanced practical training at Womack Army Hospital.

To insure close relationship between the Hospital and the School, and to broaden the training of graduates, instructors from the Medical Training School are also sent to the Hospital to supervise them. After completing this practical phase, each student is rated by the medical officer or nurse under whose supervision he works. These evaluation reports go to the soldier's commander.

To qualify as a student a soldier must have a GT score of 90, have

one year of service remaining after graduation, and he must aspire to be the best medical soldier in Third Army—and the U. S. Army.

The ultimate goal is a course of six weeks. This extra week could well be used for tours at Fort Bragg Army Hospital, or perhaps Duke University Hospital. It might also afford more time for physical training, sports, formal weekly inspections, participation in group alerts and exercises, and instruction in military doctrine.



An anatomical torso with removable parts is demonstrated by the school commandant. Anatomy is only one of many subjects studied during the 216-hour, 5-week course designed to prepare medical specialists for field duty.

Can We Rescue Gold?

(Continued from page 50)

commenced with the West German Government for increased German contributions in support of NATO, substantial aid to underdeveloped countries, and increased German purchase of American-made military equipment. Directives were issued for a substantial curtailment in the number of dependents who would be authorized to accompany personnel assigned to certain foreign countries, on the basis that important savings would arise from the discontinuance of expenditures of about \$1,000 annually per person from this source in foreign countries.

One of President Kennedy's first official actions was the lifting of this ban on dependents' travel, because of its discriminatory nature in singling out military personnel and their families as the sole bearers of personal sacrifice in the effort to reduce balance of payments deficits, and its serious consequences in the matter of morale and esprit de corps. Various other means will be put into effect to reduce outlays of dollars by military personnel and their dependents overseas, however. Mr. Kennedy recommended that the Congress enact legislation to cut the duty-free exemption on merchandise brought back by American tourists to the pre-1948 level of \$100, to eliminate tax loopholes in connection with American businesses incorporated overseas, to permit banks to pay higher interest on time deposits of foreigners,

and to set up an agency for the promotion of foreign tourism in the United States. He established a labor management committee to develop plans for making American goods more competitive through wage and price restraints and increased worker output, and directed the Secretary of the Treasury to study the possible elimination of outgrown tax incentives for Americans to invest overseas.

The core of the balance of payments problem remains the need for greater productivity on the part of American industry, and for its return to a position where it is more competitive with foreign industry. When we accomplish this, we will get not only the benefit of renewed competitive ability, but also the added bonus of American business once again becoming attractive to foreign capital, and at the same time reattracting more of the American capital which is now going overseas at an alarming rate. The necessity of our finding a proper solution—and doing so promptly, while we still possess that priceless asset: the confidence of the whole free world in our monetary stability—is aptly summarized in the cogent words of Dr. Ludwig Erhard, Economics Minister of the Federal Republic of Germany: "If the sun—the dollar—around which all other currencies revolve, starts to move, which Heaven forbid, the consequences for the West would be unthinkable." The real question is: "Can we as a nation impose the necessary discipline upon ourselves?"

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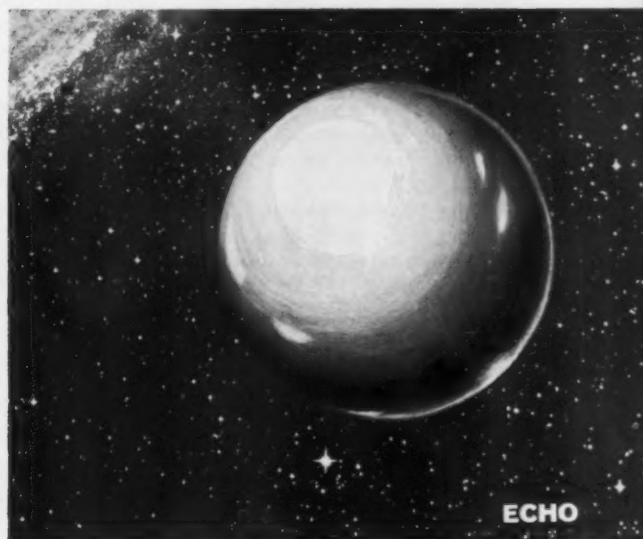
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ARMY

irons in the fire

Mapping Speedup

A high degree of accuracy and much greater speeds in placing names on maps will be made possible when the Army Map Service receives a new automatic type placement system from Concord Control Inc., in July.

According to the company, the system will eliminate many tedious manual operations formerly required to get names, conventional symbols and numbers onto the final product for use by squad leaders and generals.

Although the system is highly automated, no special technical training for Map Service operators will be necessary.

Artillery Computers

Although the human element can never quite be eliminated, the slip-stick-wielding fire control operator may be en route to join the horse-drawn French 75 in the artillery Valhalla.

An artillery officer in Fort Sill's Office of Combat Development and

Doctrine has stated that "artillery can use computers successfully," and cites a demonstration held last fall at Fort Huachuca, Ariz., when batteries of both 105mm and 155mm howitzers, without registering, showed that artillery can obtain "first round accuracy" on targets of known location when a computer is used to prepare firing data.

The computer applied weather conditions at many levels through which projectiles were to pass and corrected for weather at each level, rapidly producing a true solution for the trajectory. The machine also considered a list of 127 targets and prepared a complete non-nuclear fire plan in about six minutes, taking into account the type of target, effect desired on the target, ammunition and number and type of fire units.

Artillerymen concluded that use of computers for fire planning "is expected to improve the quality of fire support through a great increase in the speed of preparation



Weighing only 50 pounds yet capable of developing 75 hp, this gas turbine engine from Williams Research Corp., is being installed for test in an Army ¼-ton GP. If engine proves practical, weight reduction will prove valuable in airborne operations.

and dissemination of fire plans and through a more efficient use of available fire units."

Indicating that computers will have significant operational value in employment of nuclear weapons, the "brain" analyzed a number of nuclear targets and prepared a complete fire plan in about 10 minutes.

Turbine Jeep

A gas turbine engine, intended for use in such light vehicles as jeeps and sports cars, has been installed in a ¼-ton truck for test at the Ordnance Tank-Automotive Command in Detroit.

According to the contractor, Williams Research Corp., the engine is the smallest gas turbine ever tested in any vehicle. It weighs about 50 pounds and develops 75 horsepower. In the ¼-ton, it will replace the present four-cylinder piston engine, its radiator and cooling system, which altogether weighs several hundred pounds more than the turbine engine.

A company spokesman said that gas turbines are noted for their durability, ability to burn a wide variety of fuels and deliver high

Army missilemen assemble the highly-mobile Sergeant SSM on the erector-launcher made by Ling-Temco Electronics, Inc. The company has received an Army contract of more than \$1.5 million for manufacture of the air transportable erector-launcher which helps to make the Sergeant one of the Army's most mobile missiles.



POUND FOR POUND VERSATRAC CAN GO MORE PLACES, HANDLE MORE JOBS, CARRY HEAVIER LOADS THAN ANY OTHER UTILITY VEHICLE



Versatrac is a full-tracked, lightweight vehicle based on the proven design of the Hawk Missile Loader-Transporter. It can carry a load of men and material equal to its own weight through sand, snow, mud or water, and up a 60% grade. It can cruise, fully loaded, for 200 miles at a speed of more than 35 mph. It is air-transportable by helicopter or cargo plane, and can be dropped onto the tactical area by parachute.

Standard variations of the basic Versatrac vehicle include an amphibious personnel carrier — adaptable

as radio or command vehicle, cargo vehicle or tracked van; a self propelled 105 mm howitzer carriage, 318 mm rocket launcher, bulldozer, trencher, forklift and auger.

Versatrac is thoroughly tested and proven, and is available now.

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NORTHROP

IRONS IN THE FIRE

torque at low vehicle speeds without complex transmissions. The gas turbine also provides a substantial weight advantage where vehicles must be air transported.

The basic engine is only 10 inches in diameter and 19 inches long, less accessories and gear case.



Army has contracted for more than 7,000 new Ford CP M151 quarter-tons. The M151, designed for airborne operations, weighs 1,000 pounds less than former model, has greater cruising range, more cargo space and improved riding comfort.

One-Man 'Copter Loading

Vertol Division of Boeing has come up with a unique integrated loading system, making it possible for one man to load or unload two tons of military cargo from a Boeing Vertol 107 in three minutes or less.

The new system includes recessed rollers in the floor and ramp for moving cargo pallets; guides for wheeled vehicles and cargo; and two roller-equipped cargo beams 20

Bell Helicopter marketing new turbo-supercharged, three-place utility ship, the 47G-3B, this month. Claims 'copter will have sea level performance above 15,000 ft. at max. gross weight. "Ship can operate and safely deliver payload in more of earth's areas and under a wider range of temperature and altitude than any similar-size rotary-wing craft," says Bell. . . . **RUGGED new hose** by Goodyear can stand plenty crushing by heavy trucks. Possible Engineer water-point use. . . . **SOLID tantalum** capacitors from RCA may have many miniaturization military and space uses. Up to 24 may be mounted on printed circuit board the size of postage stamp. . . . **PUSH-PULL props** on new Cessna "Skymaster" which has power plants at both ends of cabin. Made possible by twin tail booms a la WW II P-38. . . . **LATEST Goldbergerian** classic from Ford's "Stimulator" is called "The

feet long which serve as ramp extensions.

The system was especially designed for military field use where loading and unloading time can be critical. It can be used in rugged terrain without the use of ground equipment or ground personnel.

hot sparks

Mole, a sort of track-laying "Side Hill Gouger." Mole would have cluster of augers in nose of vehicle for digging multiple-purpose shelter or storage tunnels at high speeds. . . . **BUILDINGS in barrels** under study by Belvoir Engineers may be answer to lots of logistics problems. Barrels contain liquid plastic for mixing with chemicals to form rigid building materials, on site, of plastic foam. Said to be economical at about \$1 per pound. . . . **PORTABLE anesthetic** generator unit for Army field hospitals under development by the Lummus Co. Can fill cylinders with nitrous oxide under combat conditions, eliminating need to ship anesthetic containers thousands of miles. . . . **WIND tunnel** able to produce momentary blasts of air up to 20 times speed of sound designed and built by Martin Company. Many uses predicted in missile flight and re-entry studies.

Gravity is used for unloading, the cargo being allowed to slide down the ramp from the four one-half degree nose-up attitude of the aircraft on the ground. To load, pallets are pulled aboard by a hydraulic winch which is part of the helicopter's standard equipment.

The Navy's newest close ground support attack aircraft, the Grumman A2F-1 Intruder, packs a greater punch than the World War II Flying Fortress. The all-weather aircraft carries 30 bombs, weighing 500 pounds each, in clusters of three under the wings. Two-place carrier-based Intruder also carries nuclear weapons.



VTOL Transport

Development of a VTOL assault transport is the objective of a tri-company team of air frame manufacturers representing Chance Vought, Ryan and Hiller.

These three companies are combining their resources to formulate and submit a joint proposal to the Army, Navy and Air Force in the design competition.

The program will provide VTOL transports for operational suitability testing, making it possible for the services to evaluate their requirements for vertical takeoff and landing transports and to explore such operational problems as the effects of downwash velocities, control, maintenance and capability to operate under various conditions of flight.



from the reaches of space

Unretouched time exposure shows Echo I communications satellite (long line) crossing heavens right to left. Shorter lines are stars "in motion."



to the depths of the sea

Actual undersea photo of telephone cable off coast of Florida.



we use all of the arts of communication to serve you better

One of our biggest capabilities is providing defense communications—wherever needed.

If we can't fill communications needs off the shelf, then we'll start fresh and create the answers to the problems. We've done that hundreds of times.

We recently handled the world's first telephone conversation *via satellite*. And we have started development of a world-wide communications system employing satellites.

We developed the world's first undersea telephone cables to speed calls between continents.

When industry and government needed a way of gathering huge amounts of coded information from distant

points, we were ready with our vast telephone network and Data-Phone, which transmits at extremely high speeds.

Far in the frozen north, our engineers are putting together the communications system for BMEWS, the nation's Ballistic Missile Early Warning System.

For strategic defense installations, we provide a Group Alert and Dispatching System making it possible for one pull of the dial to ring up to 480 telephones *simultaneously*.

Universal communications—the finest, most dependable anywhere—are what we deliver. Inside, outside, on land, under the sea, through the air, or into space.

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ARMY

books

HOW WE HAVE GONE TO WAR

THE HAPHAZARD YEARS. Col. George C. Reinhardt & Col. William R. Kintner. Doubleday & Company. 235 Pages; Index; \$4.50.

Reviewed by

COL. WALTER E. LORENCE, who has done extensive research in comparative history and its impact on the physical, economic and social sciences.

Was our growth into one of the two great world powers haphazard or were we just lucky? Did we reach the top in spite of or because of the way we have gone to war? Beginning a decade before the Spanish-American War and carrying through World War II, the authors examine and weigh many interesting men and events, and declare our course to have been haphazard.

The authors' "real concern is with fathoming the significance of our techno-military history." Traditional antipathy for militarism, they say, took root because our nation was formed by dissenters from Europe's intolerant monarchies and religions. What would mankind be today had Germany or Russia outstripped us in the race for the atomic bomb? Their answer is that a small group of scientists, many of them foreign-born and -educated, had the vision and intellect to spearhead the work that prevented such a disaster. But they fail to weigh the important fact that like their forebears, these scientists also fled dictatorships, and would not have come to a militaristic state.

The book emphasizes that our contributions to science during World War II were mostly in the application of basic research to military hardware, rather than in the discovery of fundamentally new scientific concepts; also that our allies developed much of the new war equipment.

But even in the midst of our

frantic mass production of war materiel we did not neglect the new scientific discoveries as the great Manhattan project demonstrated. But a development the size of Manhattan required great organizational and administrative abilities. These were provided by the Army Engineers and their civilian colleagues from the various engineer districts.

As for where we stand today, "probably the Communists' empire will achieve, in some key areas, technological equality with the U. S. and, in selected fields, technological superiority."

These authors say that "the crucial danger confronting the U. S. is our continued reliance on qualitative superiority and its corollary: failure to provide adequate, ready military formations in all categories." And: "Increasingly lulled by a luxurious living standard and comfortably secure in the belief that the American genius will somehow make up for our past shortcomings, we content ourselves with an inadequate defense program. . . . We hopefully concentrate our military technology upon improving a long-range striking force, whether aircraft or missiles, to deter war. Yet the requirements which might deter, or win, limited war, are neglected."

In looking to the future, they suggest that "First, we must allot sufficient resources in both money and manpower to technological progress. Secondly, we must make available more systematic training in technology for military personnel so that our military strategy can be fashioned by knowledgeable military planners. Thirdly, we must also make an attempt to solve the problem of recruiting and training the highly qualified scientific and engineering manpower essential to maintain simultaneously an expanding civilian economy and even the arms race. Finally, better man-

agement must cut down decision lead times on choices and streamline procedures for administrating technological development."

Fine, so far as it goes, but this is only a technique. Two important points need to be added. First, we must have clearly defined goals that will work in our type of democracy. Secondly, we must have large numbers of technically trained trade school (not engineering college) graduates, both in the armed services and in civilian industry, to man and repair the increasing numbers of weapons and machines.

In the final analysis, the authors suggest that "the basic question remains for solution, as it has throughout our history, in the conscience of the American people." They see this question as being "the choice of our children's future versus second cars and color television."

I believe that if the best of our top minds have to offer for the vast expenditures in defense is total destruction through massive retaliation, then the affluent will prefer to remain affluent to the end. They must be made to feel we can still defend our world without a feeling of hopelessness. I think that if we can couple our all-out joint effort with a defense accomplishment that will give hope for a war without destruction of the things Americans have always believed are worth fighting for, then Americans will tighten their belts and say "Let's go!"

MENTAL PROCESSES OF ECONOMISTS

THE ECONOMICS OF DEFENSE IN THE NUCLEAR AGE. Charles J. Hitch, Roland N. McKean and others. Harvard University Press. 422 Pages; Illustrated; Index; \$9.50.

Reviewed by

HERBERT E. STRINER, an economist, who is on the staff of The Brookings Institution.

For those who would understand the mental processes of the economist who uses operations research to analyze complicated military problems, this book is a must, and such an understanding also is a must. The authors of this excellent work are with the RAND Corporation; hence, the Army reader may take exception to some of their

judgments, but not too frequently and not without some hesitation and self-analysis.

One of these instances occurs in the last chapter, by Albert Wohlstetter, who argues the case too strongly for the apparently insurmountable obstacle to nuclear disarmament. "We must bear in mind that the more extensive a disarmament agreement is, the smaller the force that a violator would have to hide in order to achieve complete domination. Most obviously, 'the abolition of the weapons necessary in a general or unlimited war' would offer the most insuperable obstacles to an inspection plan, since the violator could gain an overwhelming advantage from the concealment of even a few weapons."

This argument must stand or fall on our definition of the number Wohlstetter means by "few weapons," and I assume he means nuclear weapons. Unless by "few" he means at least a few hundred, I would question the validity of what he says. The basis of my argument is given way back on pages 8-10 of this book. Barring large-scale passive defenses, total bomb-on-target requirements to destroy U. S. urban concentrations are thought to be in the low hundreds. Against a very effective air defense, the number of bombs would have to be several times that. If, then, we assume an enemy with only 20 or 30 ICBMs (which I would qualify as a few) and a fairly effective U. S. air defense, a well-prepared mobile ground force, and seapower, we could conceivably absorb some small percentage of the total missile strike and still be in the game. While we're playing this guessing game, the enemy would also have to allow for some effective cheating on our part, so he cannot be quite so certain that Polaris or Silo launchings of 20 to 30 ICBMs won't be our total retaliatory strike. In the end, then, I would tend to be for "disarmament" because the only realistic conclusion would be a radical cut in the possible use of nuclear weapons. The nuclear "war" would be a brief, but not a back-breaking, prelude to conventional conflict.

Apart from this, the book has great value for analysts of all serv-

Selected Check List of the Month's Books

This is a run-down of some of the books we have recently received

AMERICAN HERITAGE, Winter 1961. \$3.95. Articles on the storming of the Alamo; participants in Braddock's defeat who became Revolutionary War greats; Billy Mitchell's building of the Army's military telegraph lines in Alaska.

THE BARATARIANS AND THE BATTLE OF NEW ORLEANS. Jane Lucas de Grummond. Louisiana State University Press. 180 Pages; Maps; Index; \$4.50. The role played by Lafitte and his pirates; a fine military account.

COMMAND DECISIONS. Office of Military History. 565 Pages; Maps; Index; \$4.50. Decisions by field commanders to chiefs of state which were critical to the outcome of World War II. (Reviewed in ARMY for February 1960.)

THE CONDUCT OF THE CHACO WAR. Capt. David H. Zook, Jr. Bookman Associates. 280 Pages; Maps; Index; \$6.00. The war between Bolivia and Paraguay, 1932-35, over the disputed Chaco territory.

ENGINEERS OF THE SOUTHWEST PACIFIC, 1941-1945. Volume IV: Amphibian Engineer Operations. Office of Chief Engineer, GHQAFAC. 766 Pages; Illustrated; Maps; Index; \$11.50. The Engineer Special Brigades in the Pacific, as well as detailed accounts of all landings, from New Guinea to Japan. A huge volume, with superb maps.

THE GREAT ADVENTURE: America in the First World War. Pierce G. Fredericks. E. P. Dutton & Company. 253 Pages; Illustrated; Maps; Index; \$4.75. Well written, with descriptions of battles, acts of heroism, and anecdotes, a "popular" account rather than a military study.

GUNS OF THE LEWIS AND CLARK EXPEDITION. Ruby El Hult. Washington State Historical Society. 20 Pages; Illustrated; \$1.00. Firearms of the first Army expedition that made history. This pamphlet belongs in the library of the small-arms buff.

INFERNO AT PETERSBURG. Henry Pleasants, Jr. & George H. Straley. Chilton Company, 181 Pages; Illustrated; Maps; Index; \$3.95. The tunneling by the 48th Pennsylvania Infantry, under Lt. Col. Henry Pleasants, and the resulting Battle of the Crater at Petersburg.

THE IRON BRIGADE. Alan T. Nolan. The Macmillan Company. 412 Pages; Illustrated; Maps; Index; \$6.95. Civil War exploits of "The Black Hats": 2d, 6th and 7th Wisconsin, 19th Indiana, and 24th Michigan. A first-rate combat history with fine maps.

THE MARCH OF THE MONTANA COLUMN. Lt. James H. Bradley; Edgar I. Stewart, ed. University of Oklahoma Press. 182 Pages; Illustrated; \$4.00. Bradley relates the major incidents of the march of the Montana Column under Gibbon, to participate in the Sioux campaign of 1876.

MONS: THE RETREAT TO VICTORY. John Terraine. The Macmillan Company. 224 Pages; Illustrated; Maps; Index; \$4.50. The Great Retreat by Kitchener's Old Contemptibles, the core of regulars that Britain put into the field in 1914.

1961 UNIFORMED SERVICES ALMANAC. Lee E. Sharff, Wayne Hawkins & Joseph Young. PO Box 400, Washington 4, D.C. Up-to-date information for all servicemen: allotments, insurance, dependents' benefits, veteran benefits and preference, federal and state income taxes, social security, retirement, reserve forces, pay tables, statistics, and much more. A well-invested dollar.

A PICTORIAL ARSENAL OF AMERICA'S COMBAT WEAPONS. Will Eisner. Sterling Publishing Company. 128 Pages; Index; \$3.95. Small arms, accompanying heavy weapons, cannon, torpedoes, rockets and missiles—pictures, descriptions and military characteristics.

THE PRIVATE PAPERS OF HORE-BELISHA. R. J. Minney. Doubleday & Company. 320 Pages; Illustrated; Index; \$4.50. The personal side of the British War Minister's Army reforms and his forced resignation in 1940.

THE ROLLING KITCHEN. Ruth Patton Totten. Houghton Mifflin Company. 98 Pages; Illustrated; Index; \$3.00. Small, but crammed with an assortment of recipes for home dishes, party dishes, and foreign dishes, made to order for the Army wife. By the daughter of General Patton.

SEA POWER IN THE NUCLEAR AGE. Anthony Sokol. Public Affairs Press. 268 Pages; Index; \$6.00. The theme is that sea power, far from being outdated, remains an important part of our power structure.

STRATEGIC INTELLIGENCE AND THE SHAPE OF TOMORROW. William M. McGovern. Henry Regnery Company. 191 Pages; \$4.00. The author maintains that signs are plainly visible to those who know where to look and what conclusions to draw, based on economics, ethnology, and ideology.

THE YANKS ARE COMING! Editors of Army Times. G. P. Putnam's Sons. 182 Pages; Illustrated; \$5.95. Pictorial biography of General Pershing, which is also a history in popular style of the AEF he commanded. Many rare photos.

ices. It includes an excellent discussion of the uses of the game theory that should be required reading for all simulators and game theorists. Soldiers would do well to read the chapter on logistics, with the depot and arsenal systems in mind while they read.

The chapter on mobilization, civilian defense, and recuperation makes much of the futility of a World War II tooling-up-period philosophy which still pervades the system. What makes this whole farce even more ridiculous is the antiquated nature of the mobilization base. Not only the philosophy, but the industrial mobilization equipment itself, in terms of what it can produce, is of World War II vintage. This book, it is hoped, should succeed in gaining more support for a forces-in-being, ready-to-move defense system.

Correctly, the authors argue for more ground forces which are more mobile. In addition, the chapter on military research and development is an excellent presentation of the case for "duplication" in R&D. History has proved that the use of "several routes" in pursuing an R&D result has bought not only time, but efficiency. The case of the six approaches to the production of fission materials for the Manhattan District Project is only one of many which could be enumerated.

To the reader who has read so far, I would say, "Read the book; it's well worth it."

THE WAR AS THEY SAW IT

THE TASTE OF COURAGE. Desmond Flower & James Reeves, editors. Harper & Brothers. 1,120 Pages; Maps; Index; \$10.00.

I HAVE SEEN WAR. Dorothy Sterling, editor. Hill & Wang. 273 Pages; \$3.95.

Reviewed by

ORVILLE C. SHIREY, who saw combat as a major of Infantry in World War II.

World War II seems to be holding its own with authors and publishers, as these two books attest. The plain truth is that World War II was too big, too savage, too complex for real comprehension. For example, how do you go about visualizing the 30 million persons, soldiers and civilians, who died in it? You can't, any more than you can comprehend the national debt as

money. The figures are so big they lose meaning.

This, nevertheless, is the reason for these books: to remove World War II from the realm of vast impersonality for a generation which did not experience it; to re-create it through the eyes and ears and words of men and women who did experience it; and to do this both at the level of high command and the level of private soldier and private citizen. No book, of course, will ever do this successfully. War, like hell, is different for every man, and equally beggars description to someone who has never been there.

But, within this limitation, both of these books are remarkably evocative, though by no means equally so. *I Have Seen War* is a fairly standard compilation of World War II writing, mostly non-fiction mixed with a few short stories. They are so selected and arranged as to form a composite picture from the tragedy of France to the bitter end over Nagasaki, giving at least a sampling of the many faces of war. Much of the writing is excellent, though some, read almost 20 years later, has not stood up well. Many of the writers' names are familiar: John Hersey, Cecil Brown, St. Exupéry, Plévier, Norman Corwin, and others. Two accounts of the bombings of Hiroshima and Nagasaki by youngsters who survived are particularly graphic and moving.

The Taste of Courage is entirely different: a massive piece of scholarship that the military reader can chew on almost endlessly. The editors—a British publisher and a professor of literature—have selected, from among thousands of eyewitness accounts, those which in their judgment best re-create the many aspects of the war. Some of these, not unreasonably, are by high-ranking officers. Many are from letters and diaries of squad leaders and privates, American and British, German and Russian and Japanese. Prisoners of war, those who survived concentration camps, civilians who suffered under the V-bombs and those who lived through the destruction of Berlin, also have their say.

The accounts have been arranged—as nearly as it is possible to do in a book as complex as this one—

chronologically, and then by areas, including the war at sea and in the air. Where necessary, the editors have also written bridges to provide continuity in the quoted material.

The selection of material has been remarkably good. Some of it is dull, but then so is a great deal of war. But the majority is fresh and moving, the best of it almost capable of lifting you out of your chair and taking you back to a battle almost 20 years past—one that you lived through yourself.

Maps show theaters and campaigns, but are not useful for anything more detailed.

Either of these books are well worth reading, but the reader who has a serious interest in war will want to make the extra investment required to buy *The Taste of Courage*, if he must choose between them.

THE NAVY IN THE CIVIL WAR

THE NIGHT THE WAR WAS LOST. Charles Dufour. Doubleday & Company. 427 Pages; Illustrated; Maps; Index; \$4.95.

CIVIL WAR AT SEA. Vol. 1: The Blockaders. Virgil Carrington Jones. Holt, Rinehart & Winston. 483 Pages; Illustrated; Index; \$6.00.

Reviewed by

REAR ADM. JOHN D. HAYES, who has been researching the naval and amphibious side of the Civil War since 1954, and writes on it.

Despite its title, its lack of charts, and the author's efforts to straddle between buff and historian, the first of these two books is a distinguished contribution to Civil War history. The second, which is announced as the first of a three-volume narrative history of naval operations, hardly deserves a review for it has neither the coherence or emphasis expected of such an attempt, and there are eight errors in fact in the first eight pages, and others throughout the book.

The Night the War Was Lost is a definitive work on the capture of New Orleans. The author is a native of that city, an editorial writer for two of its newspapers, and a diligent and honest researcher. The New Orleans battle was the most spectacular of the fleet-against-fort actions, so decisive in the Civil War. These actions determined the

control of navigable waters that were the supply lines of the Union armies. The Mississippi, greatest of such rivers, cut the Confederacy not only in a north-south but in an east-west direction. Wrote Alfred Thayer Mahan: "The streams that carried the wealth and supplied the trade of the seceding states turned against her and admitted their enemies to their hearts."

The Civil War historian must judge and select from an abundance of source material. Mr. Dufour has perhaps leaned too heavily on memoirs written 10, 40, 50 years after events. Memoirs tell too much, official records not enough. Diaries and journals are good if not tampered with but the best source material are letters written immediately after the events they recount. The Civil War historian needs more letters by participants in published form, because they do not have the time to mine out the gold in manuscript collections although this one has done a good job with the letters of Mrs. Braxton Bragg.

Mr. Dufour could add little to the fame of Farragut, but he does put David D. Porter in his place. He is fair to Mansfield Lovell, the Confederate army commander but rough on John K. Mitchell, commander of the unfinished ironclad *Louisiana*. In speculating what the two Confederate ironclads might have done if ready, he forgets that this type was handicapped by excessive draft.

The loss of New Orleans is attributed to divided command—between that city and Richmond, between forts and fleet, and within the fleet itself. The deciding factors were the dynamic leadership, unity of command, and loyal discipline of the Union naval forces.

The whole story, not only of New Orleans, but also of the Civil War, is perhaps best expressed in a footnote where the author quotes from James Morton Callahan's *The Diplomatic History of the Southern Confederacy*: "It had an army whose achievements won the admiration of the world; but it had no navy with which to open the blockade and give the Government that probability of permanence which was necessary to secure European recognition."

1961 Reunion Calendar

As in former years ARMY is publishing the 1961 calendar of reunions and conventions of divisions and higher commands. *But unlike in former years, the reunions and conventions announced this month will not be repeated.* Additions will be published as received but one time only. We endeavor to keep this list accurate but cannot be held responsible for omissions or errors. Nor can we provide more information than is given here.

MAY

10th Mt. Div. (Western Chapter). 30 May. Denver, Colo. Write Raymond C. Vig, Room 4909, 350 Fifth Avenue, New York, N. Y.

82d Div. (WWI). 21 May. Dempsey Motor Hotel, Macon, Ga. Write James F. Brown, Jr., 1005 Bankers Ins. Bldg., Macon, Ga.

103d Inf. Div. 19-20 May. Carpenter Hotel, Manchester, N. H. Write Richard E. Brann, 12½ Maple St., Augusta, Maine.

JUNE

26th Inf. Div. 22-24 June. Hotel Bancroft, Worcester, Mass. Write Angelo J. Mantenuto, Hotel Lenox, Boston 16, Mass.

33d Inf. Div. 9-10 June. Shoreland Hotel, Chicago, Ill. Write Charles Mattucci, Room 1634, 176 W. Adams St., Chicago 3, Ill.

JULY

2d Inf. Div. 20-22 July. Continental Hotel, Kansas City, Mo. Write Steve Schwabke, PO Box 11155, Grayson St., San Antonio, Tex.

3d Armd. Div. 27-29 July. Schroeder Hotel, Milwaukee, Wis. Write Paul W. Corrigan, 38 Exchange St., Lynn, Mass.

3d Inf. Div. 13-15 July. Yakima, Wash. Write Art Richwine, Box 131-A, Route 7, Yakima, Wash.

4th Armd. Div. 6-8 July. Hotel Commodore, New York City. Write Ed Rapp, PO Box 604, Flushing 52, N. Y.

8th Armd. Div. 1-3 July. Dayton, Ohio. Write Henry B. Rothenberg, Room 1300, 134 N. LaSalle St., Chicago 2, Ill.

9th Inf. Div. 27-29 July. Sheraton-Cadillac Hotel, Detroit, Mich. Write Daniel Quinn, 412 Gregory Ave., Weehawken, N. J.

12th Armd. Div. 20-22 July. Hotel Commodore Perry, Toledo, Ohio. Write Lawrence E. Mintz, 20020 Snowden Ave., Detroit 35, Mich.

30th Inf. Div. 4-6 July. Francis Marion Hotel, Charleston, S. C. Write Major Saul Solow, 42 Parkway Drive, Hicksville, N. Y.

31st Inf. Div. 28-29 July. Morrison Hotel, Chicago, Ill. Write William F. Bedow, Sr., 3012 W. Belmont Ave., Chicago 18, Ill.

41st Inf. Div. 21-23 July. Bel Air Inn (Bellevue), Seattle, Wash. Write S. B. Huntting, 526 NW Broadway, Portland 9, Ore.

42d Inf. Div. 12-15 July. Sheraton-Cadillac Hotel, Detroit, Mich. Write R. Allen Gibbons, PO Box 342, Roanoke, Va.

45th Inf. Div. 7-9 July. Hotel Biltmore, Oklahoma City, Okla. Write Erman E. Winner, 2205 N. Central St., Oklahoma City, Okla.

63d Inf. Div. 28-30 July. Emerson Hotel, Baltimore, Md. Write Edward Witt, 10344 Loma Circle, Grosse Ile, Mich.

82d Abn. Div. 6-8 July. Claypool Hotel, Indianapolis, Ind. Write Carl L. Davis, 159 Gibson Ave., Mansfield, Ohio.

94th Inf. Div. 20-23 July. Sheraton Park Hotel, Washington, D. C. Write Roger H. Keith, 170 Hillberg Ave., Brockton 45, Mass.

96th Inf. Div. 27-29 July. Sheraton Cadillac Hotel, Detroit, Mich. Write Richard Klassen, Route 5, Kankakee, Ill.

99th Inf. Div. 7-9 July. Willard Hotel, Washington, D. C. Write John E. Cummings, 3218 W. Cary St., Richmond, Va.

AUGUST

1st Armd. Div. 25-26 Aug. Chase Park Plaza, St. Louis, Mo. Write Col. Leo B. Conner, 1529 18th St. NW, Washington 6, D. C.

1st Inf. Div. 24-27 Aug. Claridge Hotel, Atlantic City, N. J. Write Arthur L. Chait, 5 Montgomery Ave., Erdenheim, Philadelphia 18, Penna.

1st SSF. 17-19 Aug. Carter Hotel, Cleveland, Ohio. Write Eugene McCormick, 1901 S. 4th St., Lafayette, Ind.

2d Armd. Div. 4-6 Aug. Penn Sheraton Hotel, Pittsburgh, Penna. Write Col. R. F. Perry, Box 172, Alexandria, Va.

4th Inf. Div. 6-13 Aug. Hotel Seville, Miami Beach, Fla. Write George E. McIntyre, 330 Commonwealth Ave., Trenton 9, N. J.

5th Armd. Div. 10-12 Aug. Warwick Hotel, Philadelphia, Penna. Write Mrs. Claire E. Watrous, 8549 Lowell St., St. Louis 15, Mo.

6th Armd. Div. 31 Aug.-3 Sep. Sheraton Hotel, Philadelphia, Penna. Write Edward F. Reed, PO Box 492, Louisville 1, Ky.

6th Inf. Div. 3-5 Aug. Carter Hotel, Cleveland, Ohio. Write James E. Wittstruck, 4201 B St., Lincoln 10, Neb.

7th Armd. Div. 18-20 Aug. Ben-



ASSOCIATION OF THE U. S. ARMY

AIMS AND OBJECTIVES

THE ASSOCIATION OF THE U. S. ARMY shall be an organization wherein all who are in accord with its objectives may join in the exchange of ideas and information on military matters, and in fostering, supporting, and advocating the legitimate and proper role of the Army of the United States and of all its branches and components in providing for and assuring the Nation's military security.

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jamin Franklin Hotel, Philadelphia, Penna. Write Mrs. Virginia G. Willett, 2300 Bluebridge Ave., Wheaton, Md.

11th Armd. Div. 10-13 Aug. Penn Sheraton Hotel, Pittsburgh, Penna. Write Ray S. Buch, 159 Leigh St., Clinton, N. J.

16th Armd. Div. 11-13 Aug. Sheraton Park Hotel, Washington, D. C. Write Lester Bennett, 5820 Decamper Drive, Toledo 13, Ohio.

17th Abn. Div. 11-13 Aug. Hotel Washington, Indianapolis, Ind. Write W. A. Roncone, 802 Hiland Ave., Coraopolis, Penna.

24th Inf. Div. 10-12 Aug. Brown Hotel, Louisville, Ky. Write Edmund F. Henry, 402 First Nat. Bank Bldg., Attleboro, Mass.

28th Inf. Div. 10-12 Aug. Hotel Penn Harris, Harrisburg, Penna. Write George Iyob, Jr., 747 Jefferson St., Jermyn, Penna.

69th Inf. Div. 18-20 Aug. Tamiment Hotel, Tamiment (Poconos), Penna. Write Sidney Spectorman, 98 Van Cortlandt Park South, Bronx, N. Y.

76th Inf. Div. 5 Aug. Hotel Commodore, New York City. Write Maj. Gen. Henry C. Evans, 6 S. Calvert St., Baltimore 2, Md.

78th Inf. Div. 12-13 Aug. Fort Dix, N. J. Write John Ghegan, 975 52d St., Brooklyn 19, N. Y.

80th Inf. Div. 2-5 Aug. Penn Albert Hotel, Greensburg, Penna. Write R. W. Van Dyne, 205 House Bldg., Pittsburgh 22, Penna.

84th Inf. Div. 21-23 Aug. Gibson Sheraton Hotel, Cincinnati, Ohio. Write Lee C. Allen, PO Box 141, Canton, Ohio.

88th Inf. Div. 10-13 Aug. Somerset Hotel, Boston, Mass. Write Sidney Heyman, 2017 Forest Dale Drive, Silver Spring, Md.

95th Inf. Div. 18-20 Aug. Chase Hotel, St. Louis, Mo. Write Walter J. Laskowski, 467 Highland Ave., Elmhurst, Ill.

101st Abn. Div. 25-26 Aug. Pick Carter Hotel, Cleveland, Ohio. Write Col. Leo B. Conner, 1529 18th St. NW, Washington 6, D. C.

102d Inf. Div. 3-6 Aug. Manger Hotel, Cleveland, Ohio. Write Walter E. Brown, Jr., 313 County Center Road, White Plains, N. Y.

CBI Veterans. 9-13 Aug. Palace Hotel, San Francisco, Calif. Write Eugene R. Brauer, PO Box 1848, Milwaukee 1, Wis.

Ranger Battalions. 11-13 Aug. Lord Baltimore Hotel, Baltimore, Md. Write Lt. Col. Howard W. Karel, 2344 Nebraska Ave. NW, Washington 16, D. C.

SEPTEMBER

1st Cav. Div. 1-4 Sep. Granada Hotel, San Antonio, Tex. Write Col. Edmund P. Stone, PO Box 201, Pomona, Calif.

5th Inf. Div. 1-4 Sep. Syracuse, N. Y. Write Charles P. DeRose, 45 Catskill Ave., Yonkers 4, N. Y.

**lesson learned . . .
... the hard way**



ONE OF THE LESSONS that the U. S. Army painfully learned from the Korean War is that the best available equipment is needed immediately—not months after the fighting has started.

For example, American soldiers who faced the T-34 tank with the old World War II bazooka in the early days of Korea, might have helped turn the tide of battle if they had been equipped with the improved weapon which had been developed but was not available for troop use.

We must not let this happen again. Our Army must be equipped with the best weapons and equipment our Army-Industry team can produce.

THE ASSOCIATION OF THE U. S.

ARMY urges that the Army be immediately modernized with new weapons and equipment of the latest design and in sufficient quantities to assure U. S. ground forces superiority over any enemy.

By joining the Association and adding your support, or promptly renewing your membership, you can help AUSA achieve this vital goal. Membership is \$5.00 a year and includes a subscription to ARMY—the best magazine of its kind, and many other important benefits to you.

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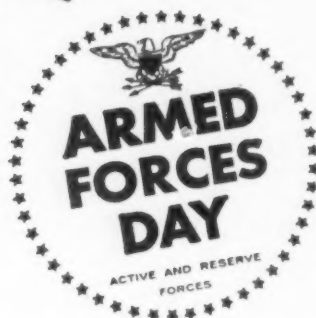
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Armed Forces Week
May 13-21, 1961

